CSSA MANUAL

NATIONAL WEATHER SERVICE
OFFICE OF CLIMATE, WATER, AND WEATHER SERVICES
OBSERVING SERVICES DIVISION

CSSA Manual Version 1.0
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CSSA Helpful Hints

1. All directions are based on true north and are entered in three digits.

2. All elevations are in feet.

3. All miles are statute miles.

4. Zip Codes should be +four. You can look up zip codes for locations at http://usps.com.

5. For each azimuth you need a corresponding range and elevation entry for obstruction entries.

6. Do not exceed 90 degrees for exposure azimuth segments.

7. CRS is a required entry in the Other Equipment tab when the MXMN and/or HYGR entry is used.

8. Clarifying statements are highly recommended in the remarks section.

9. The azimuth and range values are always zeros for a SRG entry.

10. To have ASOS precipitation data published in the CD you need to have a SRG entered in the Other Equipment tab or complete the entry in Exhibit 3-14.

11. Serial numbers are needed for the F/P and MMTS (sensor and display unit - sensor serial number goes first)

12. For all TEL, RDP, ADP and REP observations the Data Ingest Via, Mode, Relay, and When? blocks are required to be completed.

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CHAPTER 1 - SYSTEM OVERVIEW

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1. General. This manual was developed to support the modernized Cooperative Station Service Accountability (CSSA) version 1.0. The new CSSA system provides station information and metadata, observer pay (CD-404), station inspection, and reports for stations within the Cooperative Observer Program (COOP) managed by the National Weather Service (NWS). The manual is written by the NWS Observing Services Division (OS7), Office of Climate, Water and Weather Services, and includes NWS policy for using the CSSA system. The manual has been divided into seven chapters covering system overview, the quality control workflow process, data entry, observer pay, station inspections, reports, and lookup tables. The NWS policy requirements in this manual shall be adhered to by all users of this system. Questions regarding the use of the CSSA system shall be referred to the Regional Cooperative Program Managers (RCPM).

2. Purpose. The CSSA is an Internet based system with enhanced quality control; increased performance standards, consistency, and near real time availability of data. The importance of the CSSA data quality and its timely receipt by the user is paramount to understanding observational data for users of the data.

2.1 History. The NWS means of documenting COOP station metadata has progressed from hand typed forms to the DOS based computer generated forms to the Internet based system used today. The ready access to COOP station data and it's parameters provide highly valuable management tools. The previous CSSA system had a number of limitations including consistency of data across the system, programming deficits, and suffered from a lack of electronic transfer capabilities.

2.2 CSSA Policy. The meteorologist in charge (MIC) is responsible for the quality control, approval, and timeliness of CSSA data provided by WFOs. The MIC is authorized to delegate the quality control duties, but responsibility to assure the quality and timeliness of the submitted data shall remain with the MIC.

a. The CSSA system is an Oracle workflow software process used to approve or reject each form. All data are marked as draft pending final approval by the National Cooperative Program Manager (NCPM) or designee. Draft data are authorized for informational purposes, however, data is not official until the workflow approval process is completed.

b. The CSSA provides enhanced data entry quality control.

While data quality control has been automated for many entries, all entries shall be checked for accuracy by the WFO. The MIC or designee shall approve all data entries submitted to the regional headquarters level. Chapter 2 explains the workflow process.

c. The MIC is responsible for ensuring the metadata for a cooperative observing station is entered into the CSSA in a timely manner in accordance with the following requirements:

(1) The cooperative station data shall be entered into the CSSA within 30 days of the effective date for:

(a) the station being established.

(b) the station being closed.

(c) the station being reestablished.

(d) the station being relocated.

(e) the station being inactivated.

(f) the station being reactivated.

(2) The cooperative station data shall be entered into the CSSA within 60 days of the effective date of the change for any other reason not defined in 2.2.c.1

2.2.1 Responsibilities of Weather Service Headquarters(NWSH). NWSH establishes National policy and provides guidelines for program management common to all six NWS regions. NWSH establishes and tracks performance standards and procedures for inspecting and maintaining COOP stations. The NWSH develops program related handbooks and manuals that document equipment standards, observing procedures, policies, etc. NWSH determines accuracy and resolution of observational measurements, the frequency with which they should be reported and the density/spacing of observing sites. The CSSA program is a national program maintained and managed by NWSH.

2.2.2 Responsibilities of the NCPM. The(NCPM) establishes program activity and procedures required to maintain the integrity of COOP program networks and to assure the networks meet the data requirements. The NCPM provides final approval or rejection of all CSSA data submissions.

2.2.3 Responsibilities of RCPM. RCPMs implement national policies and procedures and may add additional requirements unique to that region. The RCPM provides regional level quality control of all CSSA data submissions in the RCPMs region.

2.2.4 Responsibilities of Local NWS Representatives. Local NWS Representatives (NWSREP) work at a WFO. The NWSREPs are the only individuals authorized to enter data into the CSSA system. NWSREPs may include assigned Hydrometeorological Technicians (HMT), the Data Acquisition Program Manager (DAPM), Service Hydrologists (SH), and designated meteorologists or meteorologist interns.

2.2.5 Responsibilities of COOP Observers. Observers provide observations or other services related to the COOP program. Observers may serve on either a paid or unpaid basis.

2.2.6 Responsibilities of National Oceanic and Atmospheric Administration (NOAA) Support. The following agencies within NOAA support the COOP Program.

a. National Climatic Data Center (NCDC). NCDC maintains its own CSSA archives received from the centralized database. NCDC provides the national level quality control and makes recommendations to the NCPM for final approval or rejection of a submission. Upon approval by NCPM, NCDC will make the CSSA data available to customers on NCDC web sites and through other requests.

b. Administrative Support Center (ASC). ASCs provide financial, budgeting, and accounting support to the COOP Program. The ASCs make quarterly payments to paid observers.

3. Cooperative Station Service Accountability (CSSA).
The CSSA system is a collection of COOP station information residing in a database on a centralized server at NWSH. The system is designed to provide for data entry and manipulation, observer payroll, reporting and other tasks associated with the NWS Cooperative Program. The CSSA does not include observational data. The CSSA system is used to support the nearly 12,000 stations in the Cooperative network and provides:

a. a single authoritative source for COOP station information;

b. a means of indicating the date of the last change in equipment, location, exposure, etc., at a station as well as the nature of station closures, relocations, etc.;

c. the data used at NCDC to create a permanent archive of station information critical to the interpretation of climate data, and are compiled in reports and internet web sites for customers.

3.1 CSSA Software. The CSSA must have Adobe Acrobat Reader software 4.05 or higher to display reports. Access to the CSSA must be accomplished using the Microsoft Internet Explorer 5.0 (IE5.0) or higher browser. Ensure IE5.0 is installed prior to installing Adobe Acrobat Reader 4.05. No other software is required at WFOs to enter data into the CSSA system. Search engine software may be purchased locally to support queries of the CSSA data base. The Observing Services Division at NWSH will provide direct support for specific WFO requests for reports and queries of the database. Chapter 6 provides information on reports. The current CSSA software uses version 8.05 of Oracle's relational data base system (RDBMS), version 4.0 of Oracle's Application Server (OAS), version 2.5 of Oracle's Workflow cartridge, and version 3.0 of Oracle's Report Server cartridge. The Oracle software resides on a server at NWSH.

3.2 CSSA Hardware. The modernized CSSA version 1.0 software resides on computer systems located at NWSH in Silver Spring, MD. The servers are attended and maintained from 8 AM until 4 PM Eastern Standard Time during Federal Government business days. Data entry and access is available 7 days a week, 24 hours a day, 365 days a year. The system is designed around a combination of Internet servers operating on the NOAA administration network. The RDBMS and Workflow reside on a Sun Sparcserver 450 running Solaris 2.7. OAS and Report Server reside on a Gateway Pentium III server running Microsoft Windows NT 4.0.

3.3 CSSA Hardware Requirements for NWS Data Entry. A Pentium-II personal computer or its equivalent is required for entering CSSA data. This computer shall have connectivity to the Internet and be equipped with IE5.0 or higher and Adobe Acrobat Reader 4.05 or higher.

3.4 CSSA Database. One centralized CSSA database is maintained at NWSH. There are no regional or local CSSA databases.

3.5 CSSA Access. Access will be authorized with the issuance of a username and password and restricted to authorized NOAA offices only. Every WFO has been assigned a username and password for the NWSREP and for the MIC. There are five username/password logon levels. The first level is NWSREP, the only data entry level. Level two is the MIC. Level three is the RCPM. Level four is the NCDC. Level five is the NCPM.

3.6 CSSA Enhancements. The CSSA system may be enhanced to address additional requirements and refinements as recommended by the users. The RCPMs will evaluate and as needed forward these recommendations to the NCPM.

3.7 CSSA Training. WFO staff members designated to enter data shall be provided NWS CSSA training. Available training is:

a. provided at the local level,

b. on-line training is available on the NWSTC Internet uniform resource locator (URL) web site home page at:

http://www.nwstc.noaa.gov

c. through the NWSTC CPM(01) class.

3.8 CSSA Workflow. Until the approval chain has been completed the CSSA data is considered a draft document and authorized only for NOAA distribution. The workflow will be described in detail in Chapter 2.

4. Getting Started.

a. Start Internet Explorer 5.0 (or greater). The screen display size should be set to 1024 x 768 pixels with small font.

b. Log onto the website at:

http://cmhome.nws.noaa.gov/cssa

c. When the logon screen is displayed, Exhibit 1-1, enter the assigned username and password. Then select *OK*.

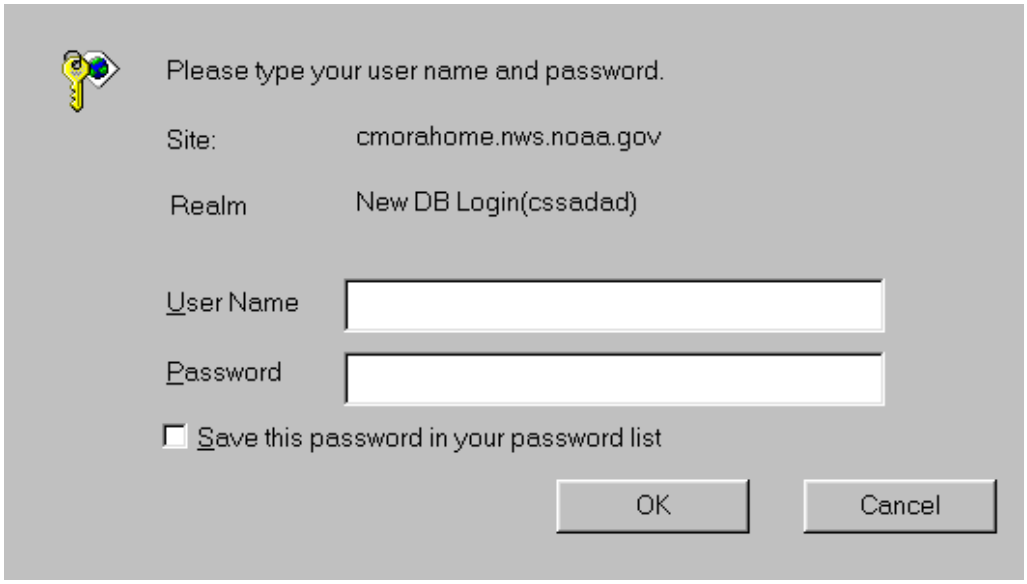

Exhibit 1-1. Logon

d. the CSSA Main Menu will be displayed, Exhibit 1-2.

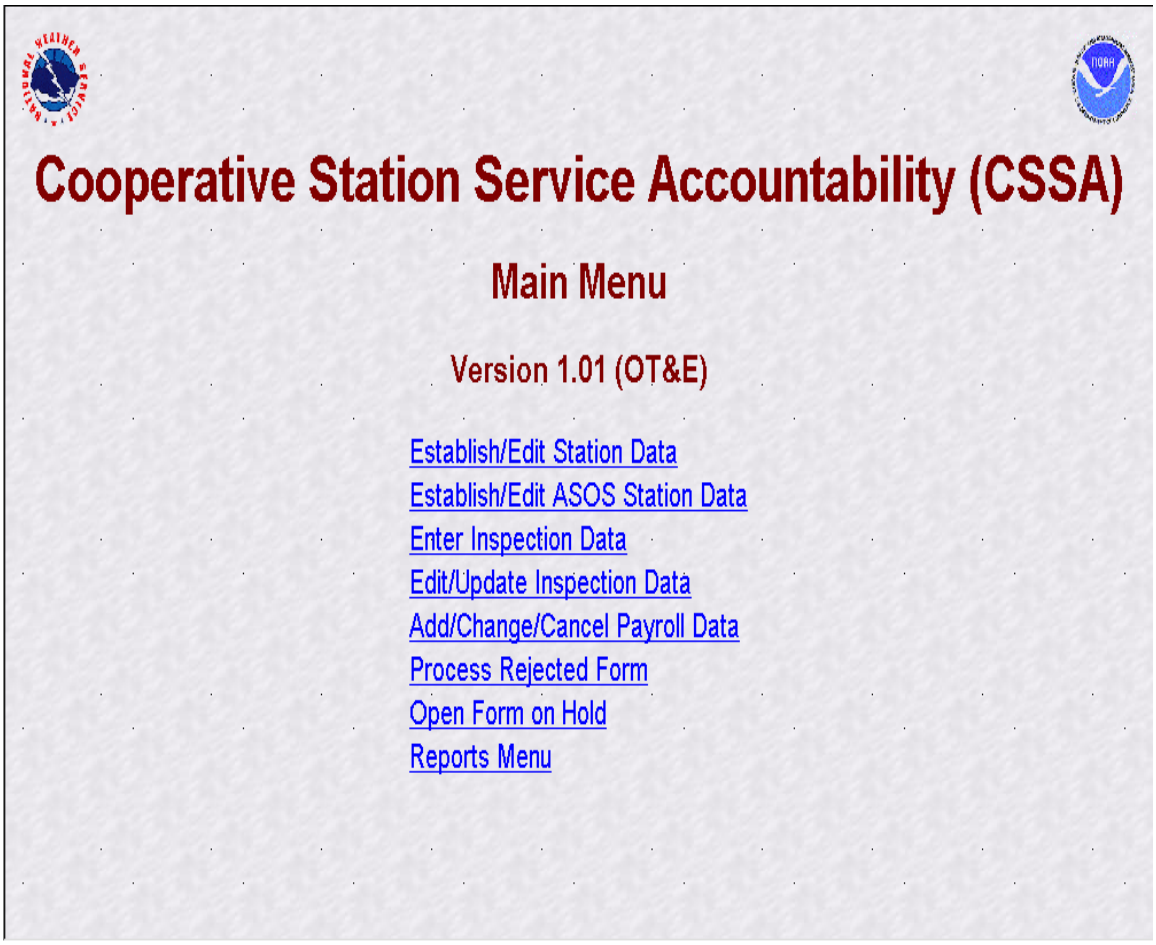

Exhibit 1-2. CSSA Main Menu

(1) Chapters 3 through 5 describe data entry rules and navigation actions to be followed from the CSSA Main Menu selection.

NOTE: Initial Database Access may require the following special procedures:

(2) Whenever a cooperative station residing in the previous database (FoxPro) is accessed in the new database for the first time, some level of manual quality control is required by the WFO. This is a one time activity for each cooperative

station. The following manual procedures should be followed to ensure high quality data:

(a) The equipment layout information has not been automatically imported to the new data base in the proper format. A window will pop up containing the equipment layout and exposure data.

(b) The NWSREP responsible for the cooperative station data entry should "copy (Ctrl C) and paste (Ctrl V)" or manually transcribe the data from the pop-up window to the corresponding areas of the new CSSA system.

(c) The NWSREP and all others in the workflow approval process should carefully **check all entries** to ensure high quality of the station metadata.

CHAPTER 2 - THE WORKFLOW PROCESS

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1. Purpose. The workflow process is introduced prior to the data entry chapter in this manual to ensure all participants of the CSSA system understand the importance of this process. A summary of the workflow process can be found in Table 2-1.

2. General. The Oracle workflow software is integrated into the new CSSA system to ensure quality control review and accountability for approval of the CSSA data at all levels of the NWS and NCDC. The station data and observer data provided on the Station Information Report (SIR) are reviewed in the workflow. The CD-404 has an abbreviated workflow process while the inspection data is not reviewed for quality in the workflow. The workflow process automatically generates an email to the next level when the data for a particular station is submitted and approved. An email is automatically transmitted to the NWSREP and MIC if a form is rejected at any level and to the RCPM if NCDC or NWSH rejects the form. An email is also automatically transmitted when the submission has been approved by the NCPM. Email accounts may be added to the workflow through consultation with the RCPMs. One entry level user name and password is provided for each WFO, but there may be multiple workflow email accounts. The email forwarding functions should be used if there is a question within a WFO of the mail being received. This chapter will describe the workflow at each level of the system and depict the screens. A summary table is provided at the end of the chapter.

3. NWSREP Level. This is the only data entry level of the CSSA system. Chapter 3, describes data entry rules and navigation. After data entry is completed and the SIR has been submitted the workflow process begins.

a. The SIR will remain designated as draft until it has been quality controlled and approved through the workflow in the following order:

(1) MIC, RCPM, NCDC, and NCPM levels.

(2) The NWSREP will receive notification through the workflow process if any of the levels reject the quality of the SIR. The NWSREP will receive an email notification of rejection in the format displayed in Exhibit 2-1.

Subject: REJECTED - Document LKN1112245 (Jackpot - 26-4016) was rejected
Date: Mon, 3 Dec 2001 10:15:11 - 0500 (EST)
From: Oracle Workflow <workflow@cmsun.nws.noaa.gov>
Reply-To: Thomas.Raffa@noaa.gov
To: john.doe@noaa.gov

Please do not reply to this message. If you have questions or comments regarding this rejection, please address them to the person(s) indicated by the Rejected By Item below.

Document LKN1112246, Jackpot has been rejected

Station Number: 26-4016

Rejected By: CSSAWR

Note from Rejector: Elevation angles missing

To view document, go to the CSSA Main Menu and click on Process Rejected Form. Click on the rejected document number. You may then make corrections to the document and resubmit, or Cancel the submission.

Thank You,

Workflow Administrator

Exhibit 2-1 Email Notification to the NWSREP

b. The NWSREP may either submit a corrected SIR with the same rendition number or cancel the SIR and take no further action. **CAUTION:** If the SIR is canceled the updated data will be purged from the database. A correction to a rejected SIR shall be submitted within 30 days of receiving the rejection notice.

c. The workflow notices of approval or rejection will be received by email. Upon a rejection notification, the NWSREP shall logon to the system in accordance with Chapter 1, paragraph 4, and select *Process Rejected Forms*.

d. Selecting *Process Rejected Forms* the NWSREP will see the Rejected Document List screen. Exhibit 2-2 depicts the Rejected Document List screen.

Rejected Document List

Click on the document number you wish to open

Document Number	Station Number	Station Name	Reason for Report
LOX1021661	PALOS VERDES ES FC43D	04-6663	CHANGE
LOX1091198	BURBANK VALLEY PUMP PLANT	04-1194	CHANGE
LOX1060890	NORTHRIDGE CAL STATE	04-6263	CHANGE
LOX10919101	PINE MOUNTAIN INN	04-6910	CHANGE
LOX11002105	WHITTIER CITY YARD FC106C	04-9660	CHANGE
LOX11002114	SIGNAL HILL FC 415	04-8230	CHANGE
LOX11002110	TOPANGA PATROL FC-6	04-8967	CHANGE
LOX11002112	SPADRA LANTERMAN HOSPITAL	04-8436	CHANGE
LOX20110116	MT WILSON NO 2	04-6006	LOCALIZED EQUIP MOVE (COMPATIBLE & SAME NAME)

No Rejected Payroll documents found.

Return to Main Menu

Exhibit 2-2. Rejected Document List

e. The NWSREP may select the desired SIR from the review list. Exhibit 2-3, depicts the Rejected Forms screen.

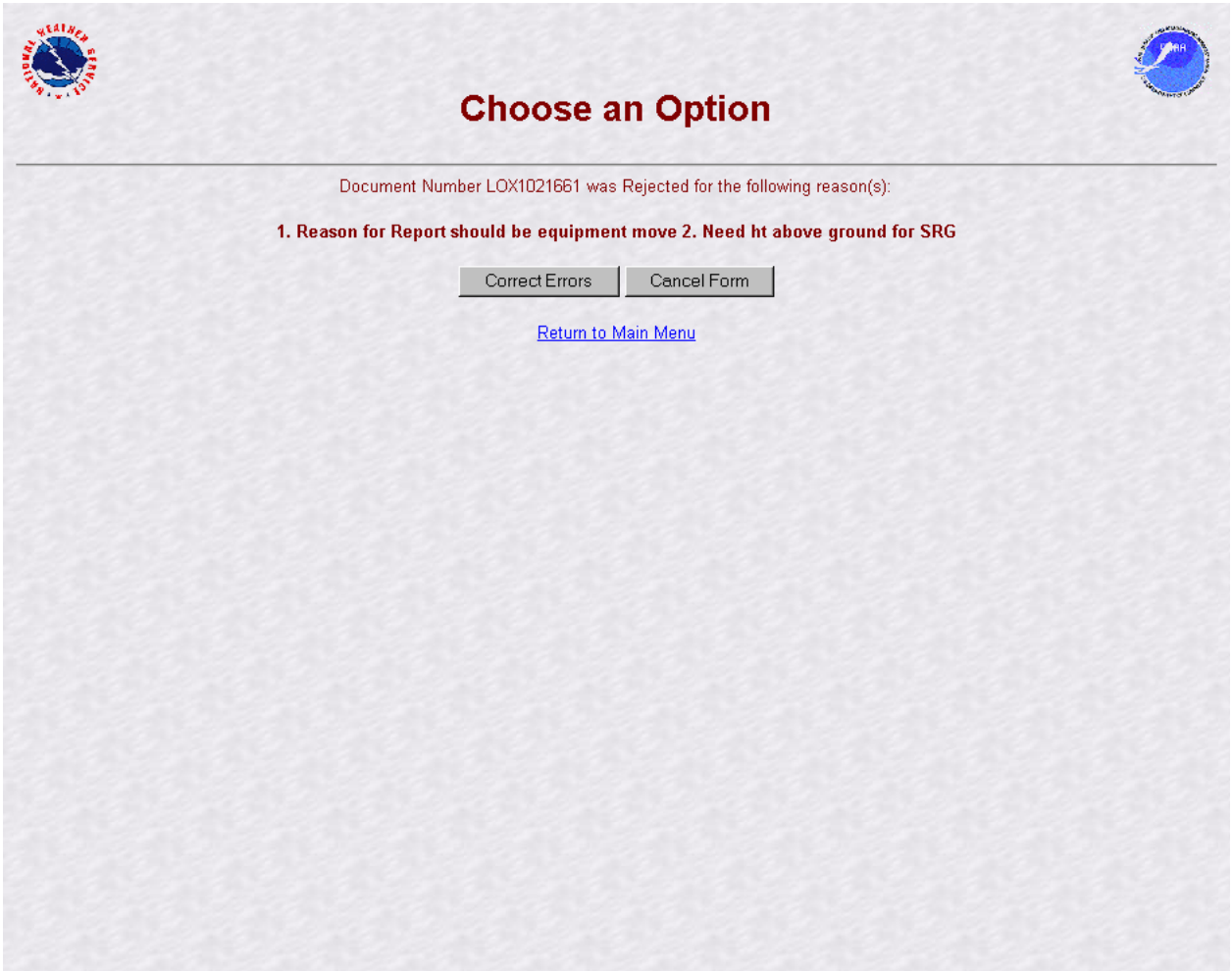


Exhibit 2-3. Rejected Forms

f. The NWSREP should then select from the three options on the Rejected Form screen:

(1) Selecting *Correct Form* will activate the edit mode of the CSSA and allow the NWSREP to correct the transaction. The data entry rules in Chapter 3, paragraph 2.4, must then be followed in processing the rejected SIR.

(2) If the *Cancel Form* selection is made:

(a) for a station newly established by the SIR, the SIR will be **PERMANENTLY PURGED FROM THE DATABASE, ALL INFORMATION PREVIOUSLY ENTERED, INCLUDING THE STATION NUMBER, WILL BE REMOVED**.

(b) for an existing station, the *Cancel Form* selection will cancel all changes made prior to submitting the SIR to the workflow process. **ALL INFORMATION PREVIOUSLY CHANGED WILL BE PURGED FROM THE DATABASE**.

(3) Selecting *Return to Main Menu* will return the NWSREP to the CSSA Main Menu with no further action taken.

g. Once all corrections are made to the rejected SIR, it should be submitted in accordance with the rules in Chapter 3, paragraph 2.4. This will not cause a new rendition number to be generated.

h. When the rejected SIR has been corrected and is resubmitted the workflow process will begin over.

i. CD-404 Payroll Management data is submitted directly to the RCPM level in the workflow.

4. MIC Level. The WFO MIC is responsible for the quality of all products disseminated from the WFO and will ensure the quality of the CSSA data before it is submitted to the RCPM. The MIC or designee should log onto the CSSA workflow SIR using MIC user name and password and ensure accuracy of the data. The SIR can be approved, rejected, or various reports concerning the data can be generated from the MIC level. If the MIC or designee determine the quality of the submission is acceptable , the SIR

is approved and notification is sent to the RCPM. If an error is noted in the SIR, it shall be rejected and comments provided with the reason for rejection. After the comments are entered into the dialogue box, the SIR should be submitted.

a. Timeliness of quality control at the MIC level is important in providing station information. The MIC or designee will receive an email through the workflow process informing the MIC level there is a submitted SIR awaiting action. The MIC level will be reminded every five calendar days by email if the SIR has not been processed. This reminder will occur three times.

b. After the third reminder (fifteen days after the initial email notification) the SIR will be automatically approved and forwarded to the RCPM.

c. If rejected, a notification is sent via email to the NWSREP. The NWSREP must follow required actions in Chapter 2, paragraph 3.

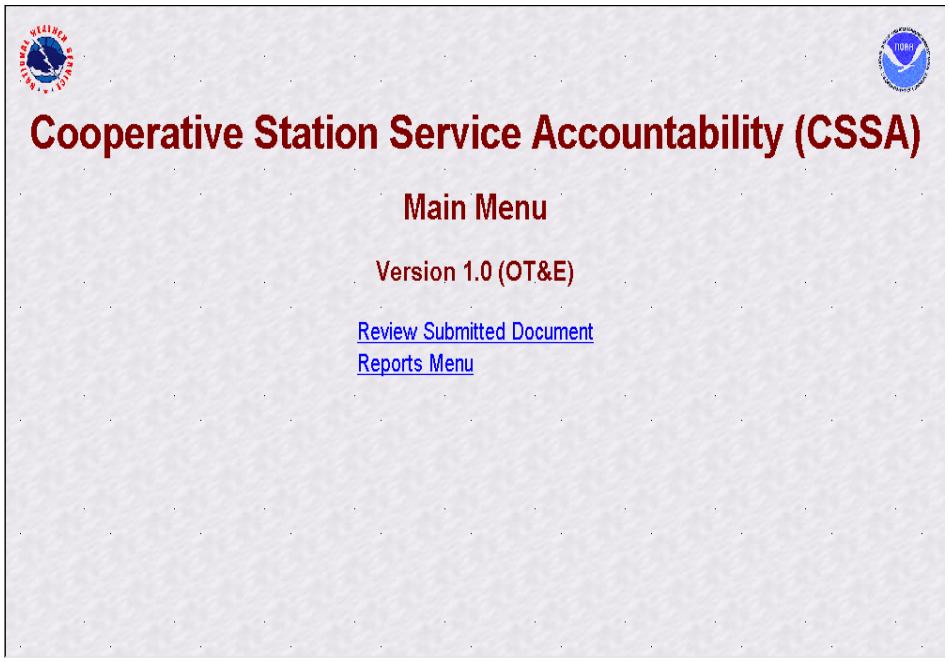
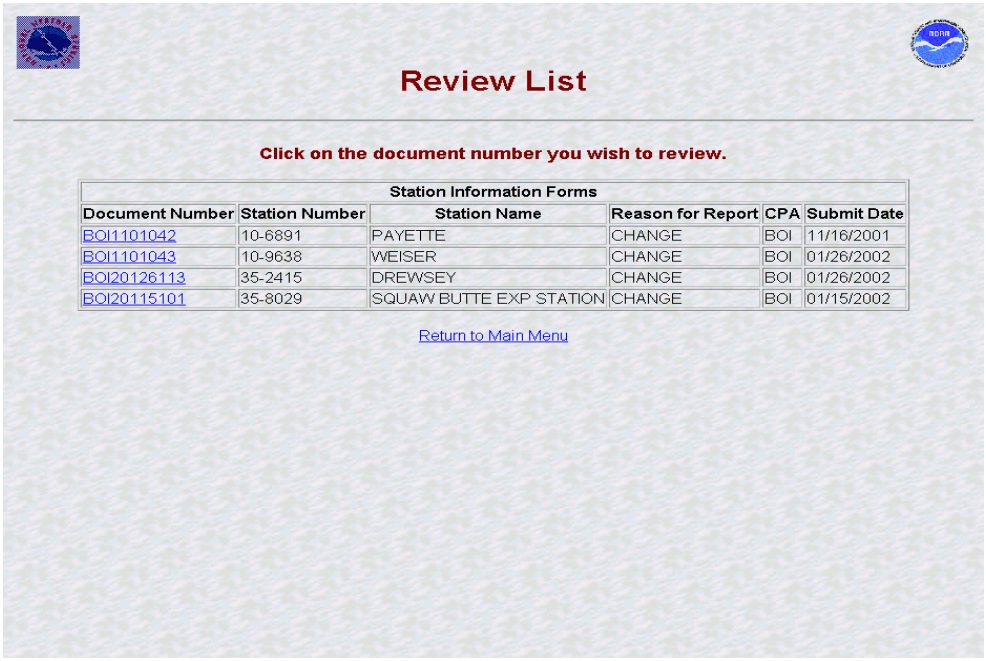


Exhibit 2-4. CSSA Workflow Main Menu

4.1 MIC review procedures

a. The MIC or designee should go to the Main Menu and select *Review Submitted Document*. The *Reports Menu* option will be described in Chapter 6, The Reports. Exhibit 2-5, depicts the Review List screen.



Review List

Click on the document number you wish to review.

Station Information Forms					
Document Number	Station Number	Station Name	Reason for Report	CPA	Submit Date
BOI1101042	10-6891	PAYETTE	CHANGE	BOI	11/16/2001
BOI1101043	10-9638	WEISER	CHANGE	BOI	01/26/2002
BOI20126113	35-2415	DREWSEY	CHANGE	BOI	01/26/2002
BOI20115101	35-8029	SQUAW BUTTE EXP STATION	CHANGE	BOI	01/15/2002

Return to Main Menu

Exhibit 2-5. Review List

b. The MIC or designee should select a station. Exhibit 2-6, depicts how the Station Information tab of the form is displayed pending approval. On the Review List screen, if the document number is displayed in blue it has not been selected before. If the document number is displayed in purple it has been displayed previously and the action was canceled and remains pending for approval or rejection.

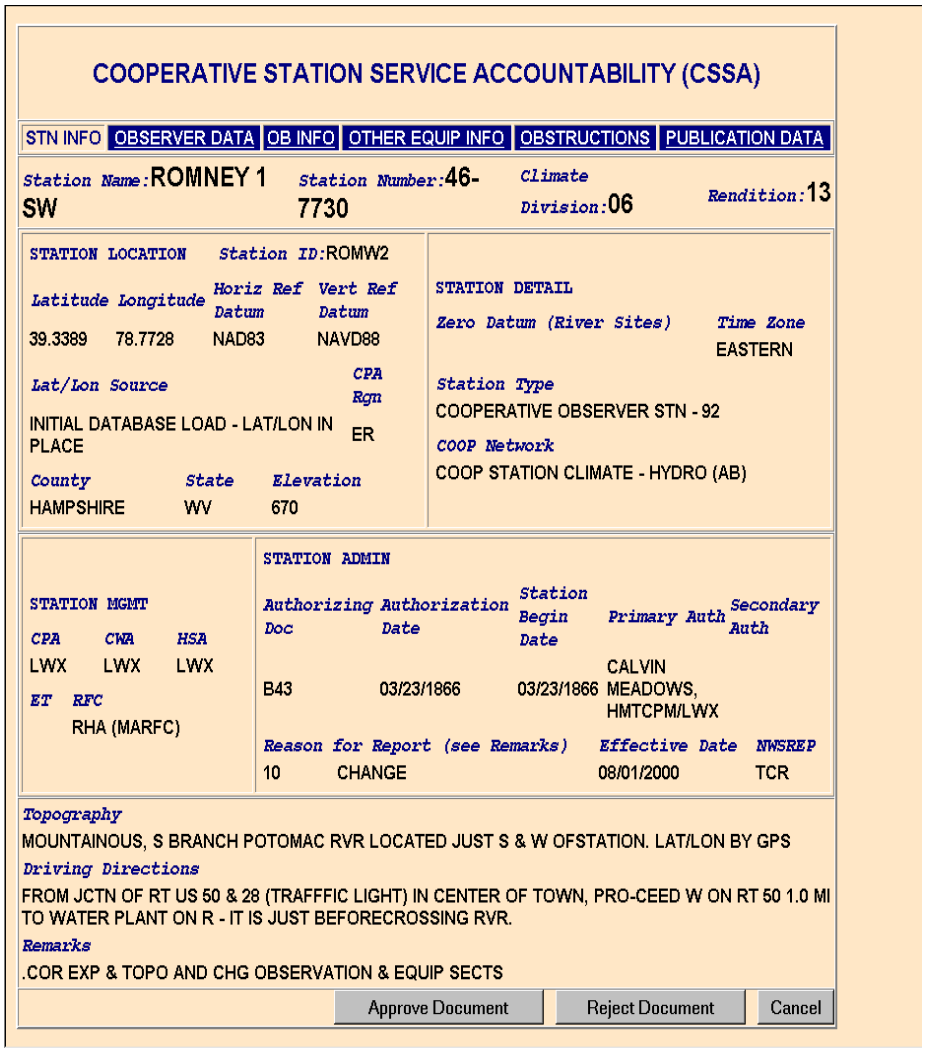


Exhibit 2-6. Workflow Station Information

c. The MIC or designee shall evaluate all fields in each of the six tabs, exhibits 2-6 to 2-11, for quality. Fields requiring correction will be noted and the MIC or designee should move to the next page by selecting the tab on the top of the screen. The MIC or designee will select either the *Approve*

Document, *Reject Document* or *Cancel* buttons on the bottom of the final page review. These buttons are on the bottom of each page and should not be used until all tabs have been reviewed.

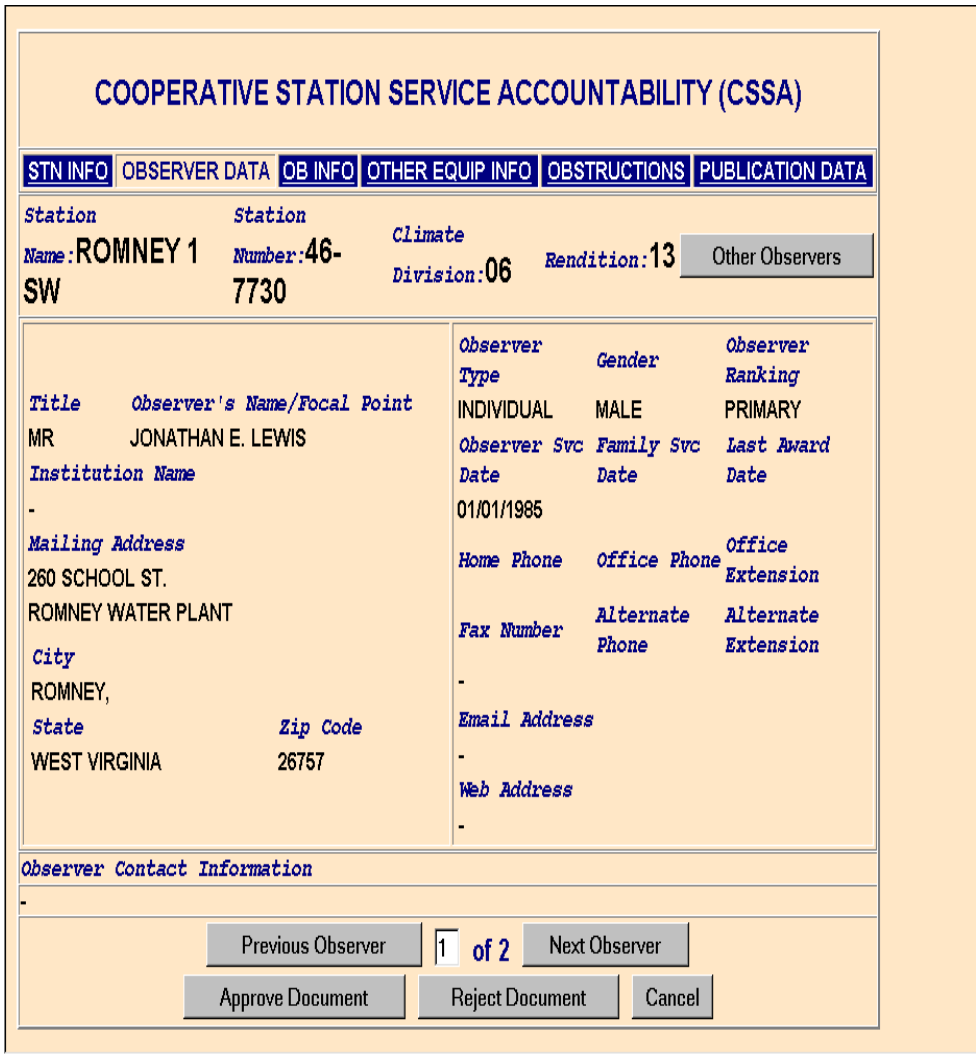


Exhibit 2-7. Workflow Observer Data

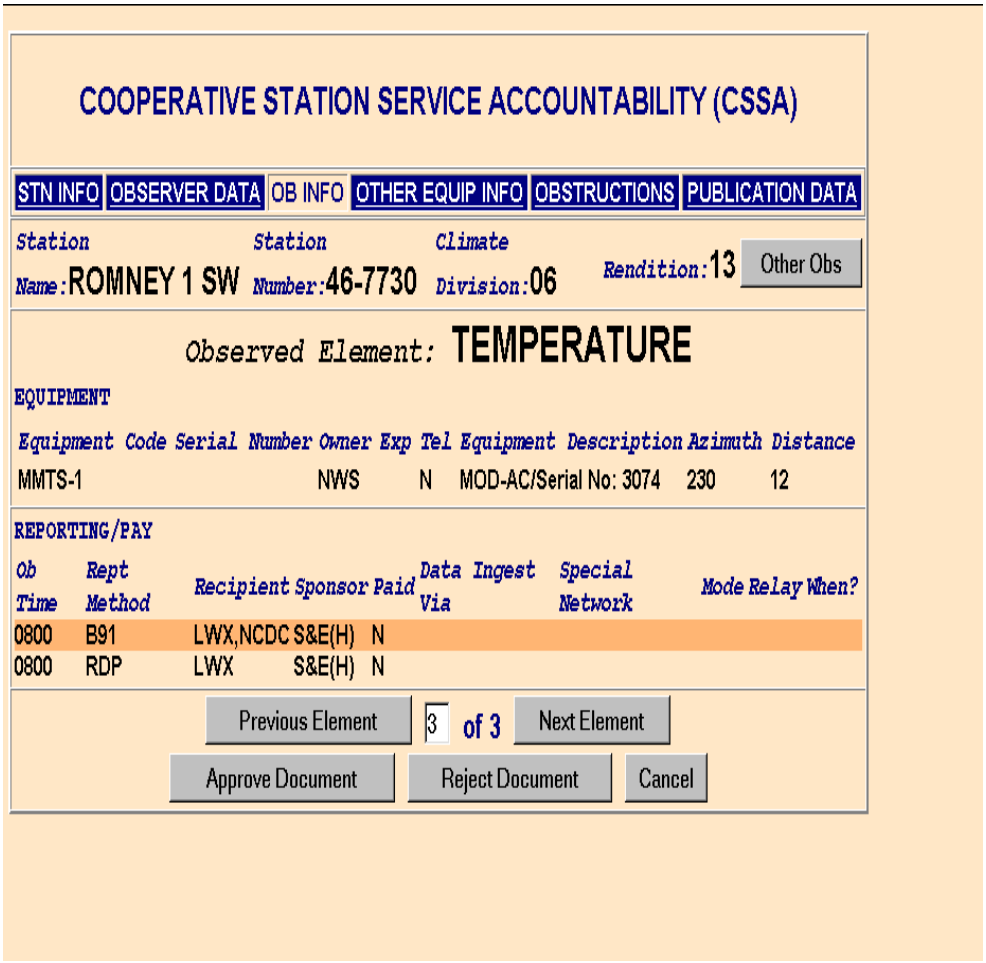


Exhibit 2-8. Workflow Ob Info

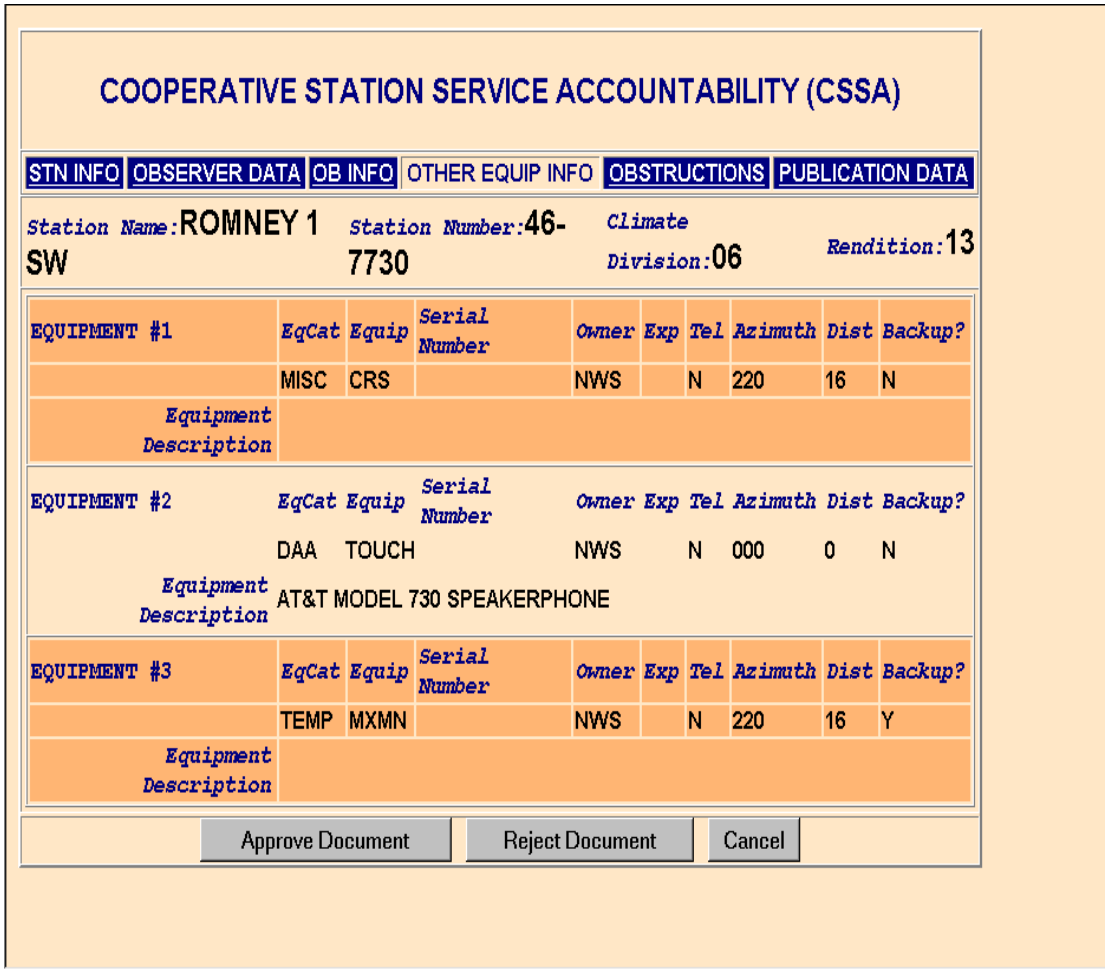


Exhibit 2-9. Workflow Other Equipment Info

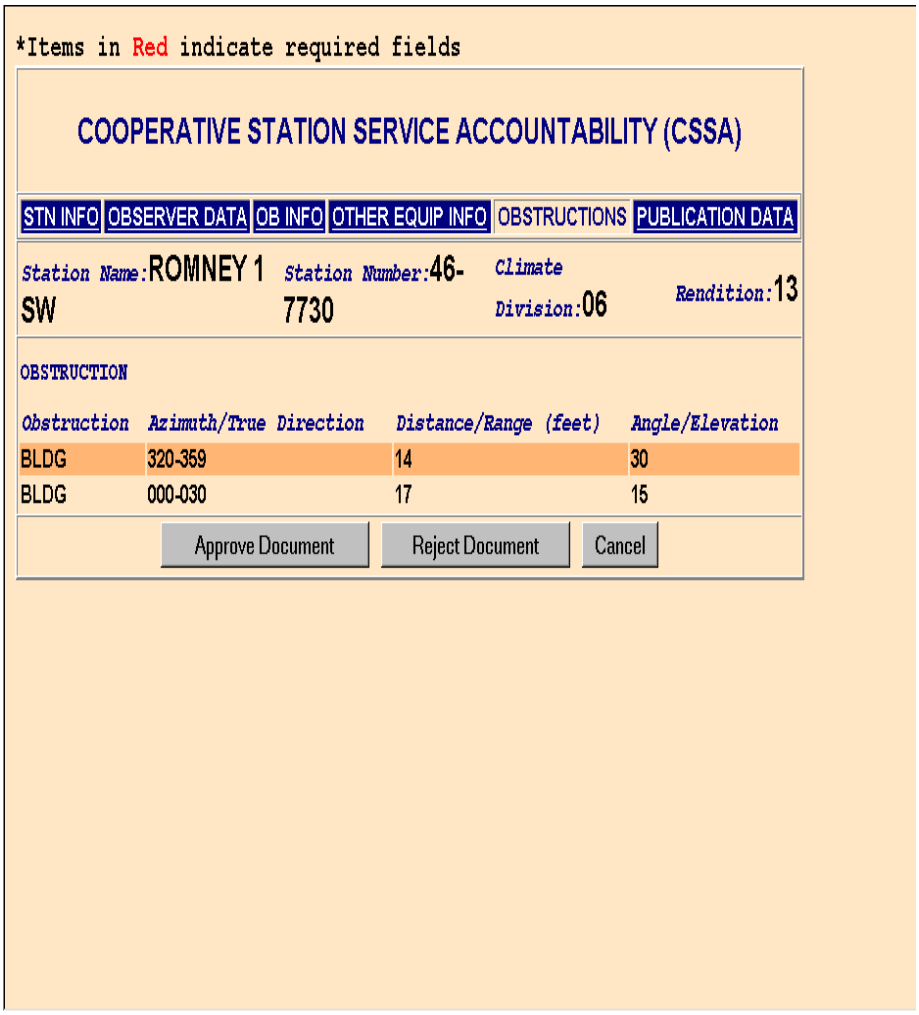


Exhibit 2-10. Workflow Obstructions

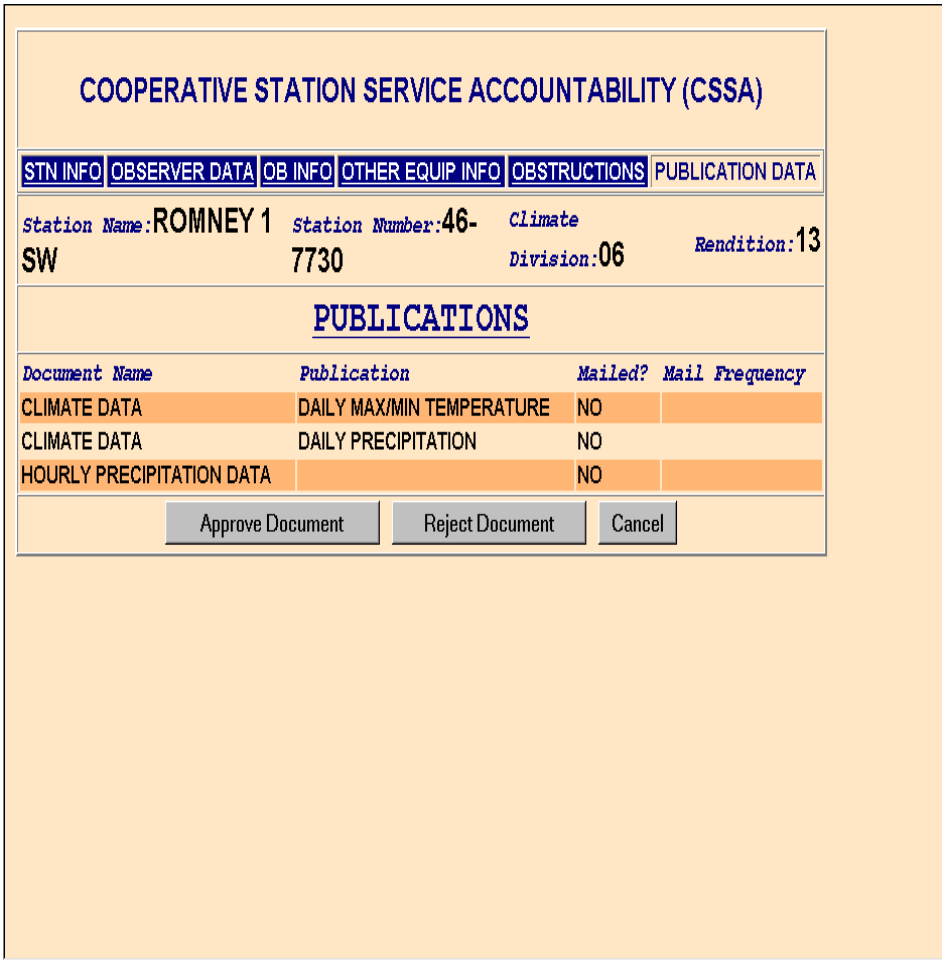


Exhibit 2-11. Workflow Publication Data

d. If *Cancel* is selected the screen will return to the CSSA Workflow Main Menu (see Exhibit 2-4) and the SIR will remain in a pending review status.

e. If *Approve Document* is selected, the Add Note screen will display. Exhibit 2-12, depicts the Add Note screen. A optional note may be added to approved SIRs. After adding a note the SIR should be submitted or canceled, by selecting the appropriate *Cancel* or *Submit* button on the bottom of the screen.

Canceling the SIR will return it to review pending status and display the CSSA Workflow Main Menu. Submitting the SIR will generate an automated email informing the RCPM the SIR has been approved and is ready for RCPM review.

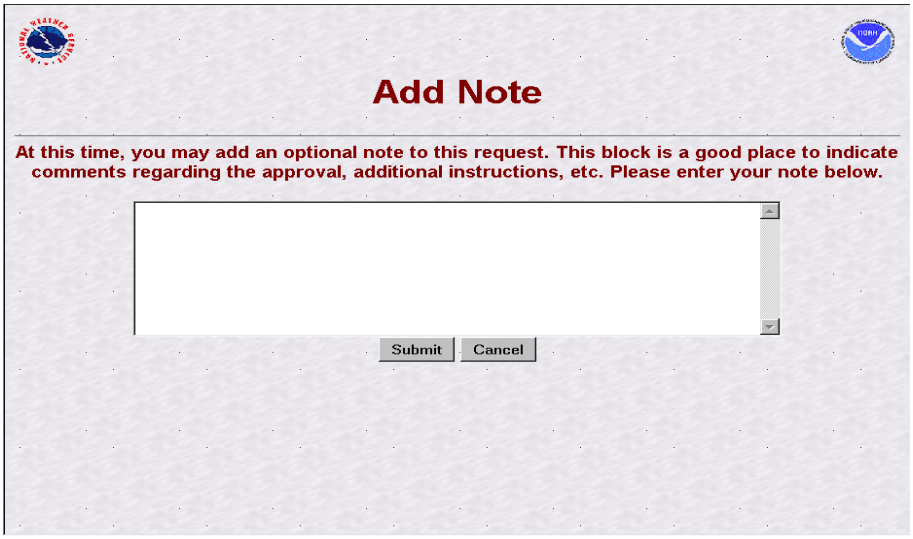


Exhibit 2-12. Add Note (approval)

f. If the *Reject Document* button is selected, the Add Note screen will display. Exhibit 2-13, depicts the Add Note screen for a rejection. The note shall provide a brief explanation for the rejection. After adding a note the SIR should be submitted or canceled, by selecting the appropriate *Cancel* or *Submit* button on the bottom of the screen. Canceling the SIR will return it to review pending status and display the CSSA Workflow Main Menu. Submitting the SIR will generate an email informing the NWSREP the SIR has been rejected and includes the note.

g. Upon MIC approval of a SIR, an email notification will be transmitted to the RCPM.

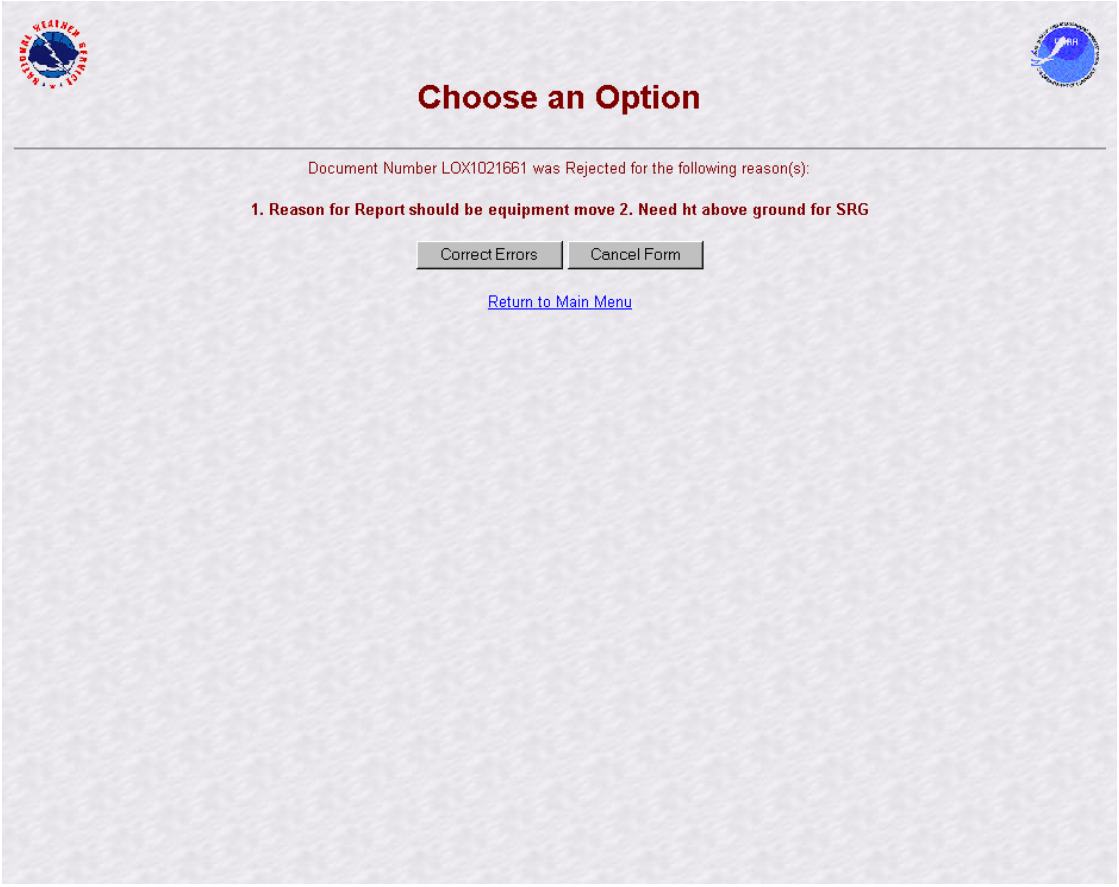


Exhibit 2-13. Add Note (rejection)

5. RCPM Level. The RCPM is responsible for providing quality evaluation of all submitted CSSA data in the region. The RCPM should log onto the CSSA using assigned username and password to review submissions. The SIR can be approved, rejected, or a report of data can be generated from the RCPM level. If the RCPM determines the quality of the SIR is acceptable, the SIR is approved for quality review by NCDC. If an error is noted in the SIR, the SIR shall be rejected and comments provided with the reason for rejection. If approved, the SIR should be submitted with optional comments provided. If the SIR approval or rejection is canceled it will be left on hold at the RCPM level

until submitted manually or automatically. The RCPM is the only approving authority for the CD-404 payroll management information in the workflow process.

a. Timeliness of manual quality control at RCPM is important in providing station data information. The RCPM will receive an email through the workflow process informing the RCPM level there is a submitted station awaiting approval or rejection. The RCPM level will be notified every five calendar days by email as a reminder if the SIR has not been submitted from the RCPM level. This reminder will occur three times.

b. After the third reminder (fifteen days after the initial notification) the SIR will be automatically approved and forwarded to NCDC.

c. If rejected, a notification is sent via email to the NWSREP with a copy to the MIC level. The NWSREP must then follow required actions in Chapter 2, paragraph 3.

d. The RCPM evaluates the CD-404 payroll data submitted by the NWSREP. The CD-404 workflow does not go beyond the regional level. The CD-404 workflow process is the same as described for the SIR, but is only between the NWSREP and the RCPM. Chapter 4, The Payroll, describes the CD-404 Payroll Management entries.

6. NCDC Level. NCDC provides national level quality control to the CSSA SIRs. The NCDC shall log onto the CSSA using NCDC username and password and is responsible for ensuring accuracy of the data. The SIR can be recommended for approval, rejection, or a report of data can be generated from the NCDC level. If NCDC, using standardized evaluation techniques, determines the quality of the SIR is acceptable, the SIR is recommended for final approval by the NCPM. If an error is noted in the SIR, the SIR shall be rejected and comments provided with the reason for rejection. The NCPM will receive the recommendation for rejection notice and must agree with the rejection prior to the notice being sent to the NWSREP and the RCPM. If approved, the SIR should be submitted with optional comments provided. If the SIR recommendation for approval or rejection is canceled it will be left on hold at the NCDC level until submitted manually or automatically.

a. Timeliness of quality control at NCDC is important in providing station data information. The NCDC will receive an email informing them a submitted SIR is awaiting review. The NCDC will be notified every five calendar days by email as a reminder if the SIR has not been submitted from the NCDC to the NCPM. This reminder will occur three times.

b. After the third reminder (fifteen days after the initial notification) the SIR will be automatically approved and forwarded to NCPM.

c. If the SIR is recommended for rejection or approval a notification is sent via email to the NCPM for concurrence. The NCPM action is described in Chapter 2, paragraph 7.

7. NCPM Level. The NCPM shall log onto the CSSA using their username and password. The NCPM has the authority to determine which SIRs should be accepted or rejected based on recommendations from NCDC. Once the SIR is approved at the NCPM level it is final and official. NWSREP, MIC, RCPM, and NCDC will be notified via email of approvals and rejections. A report of data can also be generated from the NCPM level. Upon approval by the NCPM, NCDC may post desired metadata on their internet location(s) and in other publications. If the SIR approval or rejection is canceled it will be left on hold at the NCPM level.

a. Timeliness of final approval at the NCPM is important in providing station metadata information. The NCPM will receive an email informing the NCPM there is a submitted SIR awaiting review. The NCPM will be notified every five calendar days by email as a reminder if the SIR has not been submitted from the NCPM level. This reminder will occur three times.

b. After the third reminder (fifteen days after the initial notification)level the SIR will be automatically approved and forwarded to NCDC.

c. If a SIR is rejected a reason for rejection shall be provided.

8. Summary Table. Table 2-1, is a summary of the workflow process and related notifications.

Level in workflow process	**Action required**	**Time frames for required actions**	**Action taken if SIR is approved**	**Action taken if SIR is rejected**	**Comments**
NWSREP responsible for entering the data for a particular station	Enter data and submit SIR. It is the responsibility of the data submitter to ensure accuracy and timeliness.	Refer to chapter 3, paragraph 2.2	None required at this level	Enter the required corrections and submit SIR.	If a SIR is rejected during the workflow process the NWSREP reviews the reason for rejections, makes appropriate corrections and starts the cycle again.
MIC or Designee	Approve or Reject SIR from the MIC screen.	An automated email reminder will be issued every 5 days for 15 days after receipt of SIR. After 15 days the SIR will automatically be forwarded to the next level.	Submit SIR to RCPM.	Reject SIR and enter reason for rejections in comments field of SIR. NWS REP is notified via email.	RCPM and NCPM notified of auto-approval via email.
Regional Cooperative Program Manager	Approve or Reject SIR from the RCPM screen	An email reminder will be issued every 5 days for 15 days after receipt of SIR. After 15 days the SIR will automatically be forwarded to the next level.	Submit SIR to NCDC for quality assurance review.	Reject SIR and enter reason for rejections in comments field of SIR. NWS REP is notified via email.	NCPM is notified of auto-approval via email.

Level in workflow process	Action required	Time frames for required actions	Action taken if SIR is approved	Action taken if SIR is rejected	Comments
NCDC	Review submission to ensure quality	An email reminder will be issued every 5 days for 15 days after receipt of SIR. After 15 days the SIR will automatically be forwarded to the next level.	Forwarded to NCPM with recommendation for Approval	Forwarded to NCPM with recommendation for Rejection	Notify NCPM of auto-approval via email.
National Cooperative Program Manager	Approve or Reject SIR	An automated email reminder will be issued every 5 days for 15 days after receipt of SIR from NCDC. After 15 days if no action is taken the SIR will automatically be approved.	Automated update to SIR as final in Oracle snapshot. Notify RCPM, MIC, and NWSREP SIR is final.	Reject SIR and enter reason for rejections in comments field of SIR. RCPM notified via email and NWSREP is notified via email.	

NOTE: Upon RCPM rejection of SIR, if reason for report is listed in Chapter 1, paragraph 2.3.c.1, then an email will be sent to NCDC.

Table 2-1. Summary of Workflow Process

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CHAPTER 3 - DATA ENTRY

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1. General. This chapter is designed to cover the data entry sections of the CSSA system. Chapter 3 is divided into sections covering entry of SIR data. Screen depictions and tables of field entry details are provided to help explain the data entry requirements.

2. COOP Program Station Information and Metadata.

2.1 Introduction. The SIR has been used to provide a complete and permanent record of a COOP station's information and data. This new Internet-based form contains a complete file on the location, observation and equipment information, observer name, etc., for each COOP station.

2.2 Reasons for Entering Data. The NWSREP documents in the CSSA system any changes to the observing site. The NWSREP may only enter data for COOP stations within the NWSREP's COOP Program Area (CPA). Enter data into the system when:

a. establishing, reestablishing, reactivating, inactivating, relocating or closing a station (30 days to submit SIR after action),

b. documenting any changes at a station (change of equipment, local equipment move, instrument exposure, time of observation, etc.) or to the observing program (60 days to submit SIR after action).

3. Detailed explanations on the various reasons for reports are provided in Chapter 7, table 3.1.

2.3 CSSA Data Entry Area.

a. To begin the data entry process, refer to Chapter 1, paragraph 4, Getting Started. When the CSSA Main Menu is displayed, select *Establish/Edit Station*. The NWSREP is prompted to enter the station number. Enter a valid station number for the CPA in the required format and select *OK*. Exhibit 3-1, depicts the Enter Station Number screen and the required format.

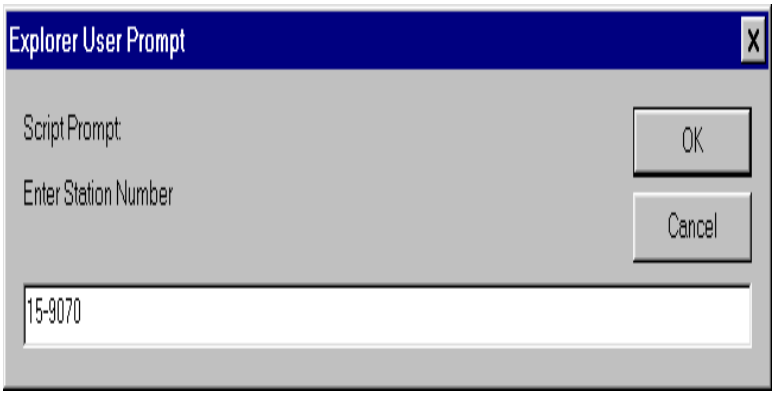
Station Number Entry Screen Depiction	Format
	The station number, assigned by NCDC, must be entered in the format ss-nnnn. ss = state number nnnn = index number

Exhibit 3-1. Enter Station Number

b. If the station number is for a new station, the **Station Not Found in CSSA Database** screen is displayed. Exhibit 3-2, depicts a Station Not Found in CSSA Database screen.

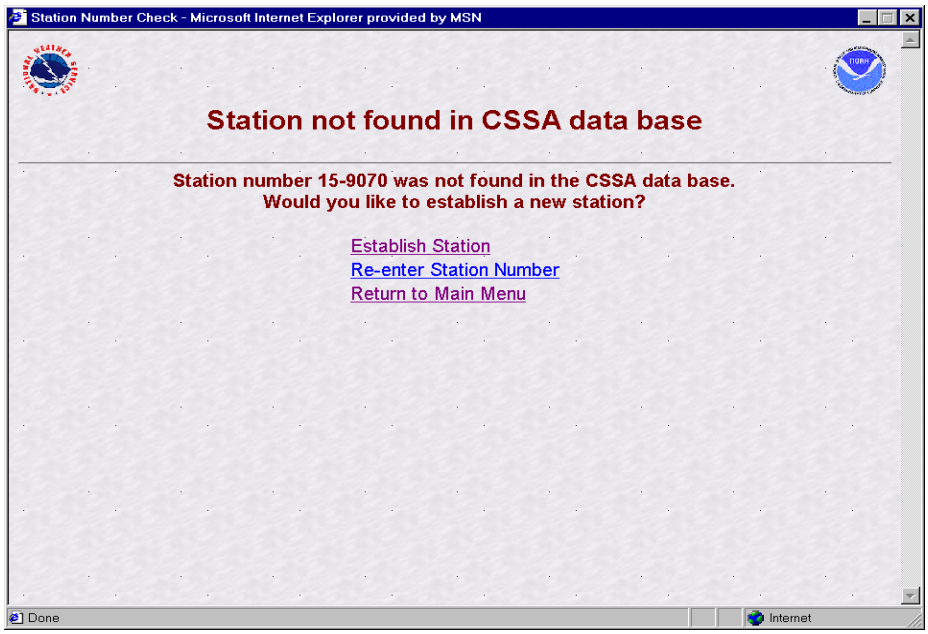


Exhibit 3-2. Station Not found in CSSA Database

c. If the station is a current station or you are reactivating a station that has historical information in the data base, enter the station number into the Station Number Entry screen. The Station Number ss-nnnn was Found in the Database screen is displayed. Exhibit 3-3, depicts the Station Number ss-nnnn was Found in the Database screen.

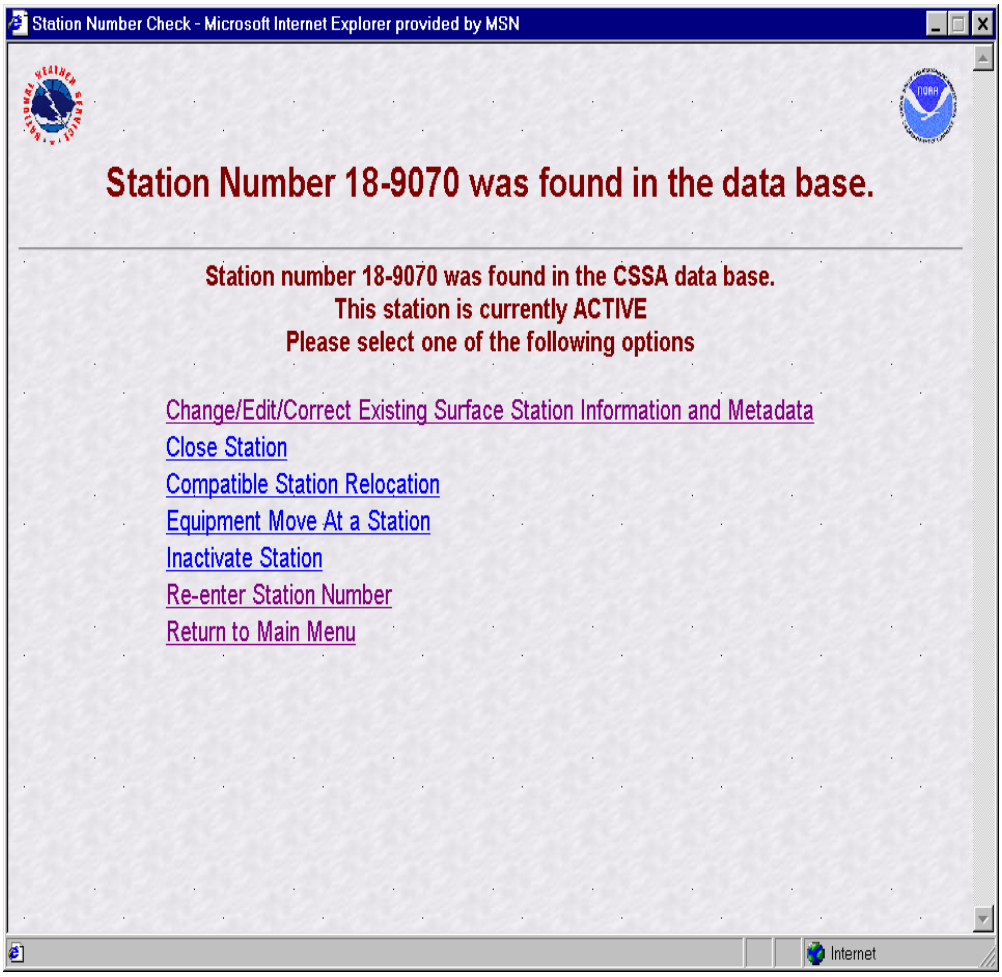


Exhibit 3-3. Station Number ss-nnnn was Found in the DataBase.

d. If the station is an **inactive station** enter the station number into the Station Number Entry screen. The Station Number ss-nnnn was Found in the Database screen is displayed. Exhibit 3-4, depicts the Station Number ss-nnnn was Found in the Database screen.

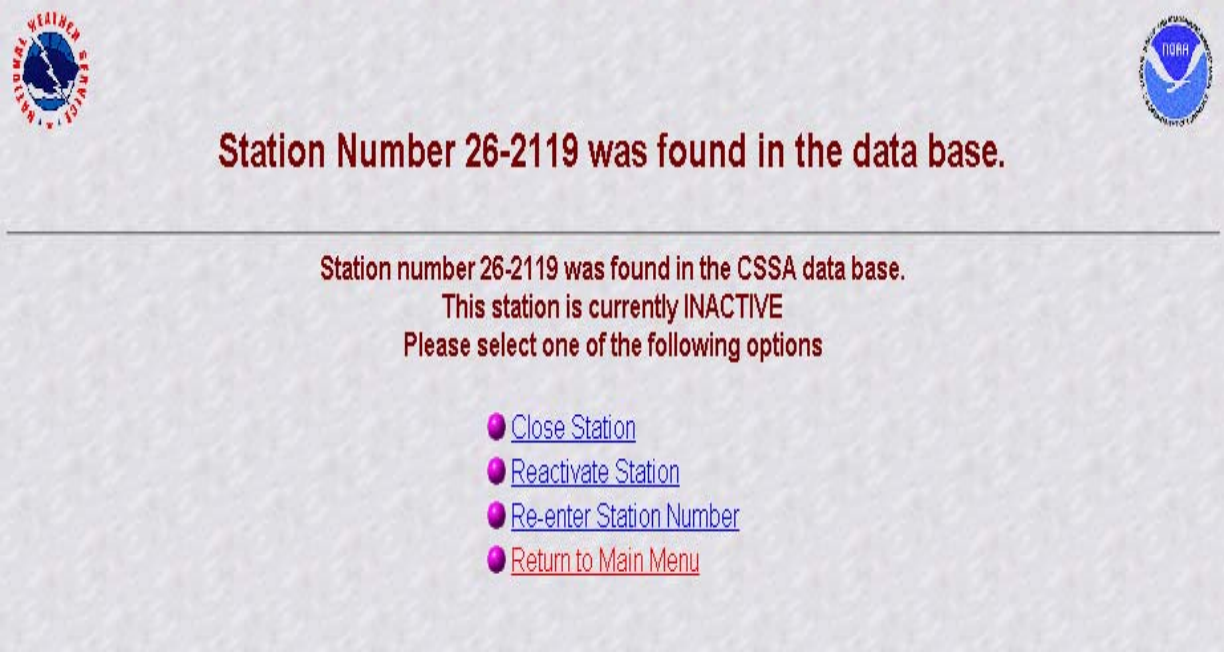


Exhibit 3-4. Inactive Station Number ss-nnnn was Found in the Data Base.

e. Table 3-1, provides information on the menu selections for the screen depictions in Exhibits 3-2. 3-3, and 3-4.

Menu selection Exhibit 3-2	**Action**
Establish Station	Displays CSSA screen. Ready for data entry of new station data.
Re-enter station Number (see Exhibits 3-2 to 3-4)	Displays Station Number Entry Screen. (Exhibit 3-1)
Return to Main Menu (see Exhibits 3-2 to 3-4)	Displays CSSA Main Menu. (Exhibit 1-2)
Menu selection Exhibit 3-3	Displays CSSA screen. Ready for editing of existing data. Ensure the proper menu selection to safeguard the correct "Reason for Report" code is generated. **For all equipment and station moves the distance and direction of the move MUST BE documented in the remarks section.**
Change/Edit/Correct Existing Station Information and data	
Close Station	
Compatible Station Relocation	
Equipment Move At a Station	
Inactivate a Station	
Menu selection Exhibit 3-4	Same as Exhibit 3-3 Action Column
Close Station	
Reactivate Station	**For all equipment and station moves the distance and direction of the move MUST BE documented in the remarks section.** If the equipment remains at the previous location then state "no equipment move".

Table 3-1 Menu Selections for Exhibits 3-2, 3-3, and 3-4.

f. To begin entering new data or editing existing data, choose the applicable menu selections in Exhibits 3-2,3-3 or 3-4. Refer to Chapter 7, table 7.1, for explanations on choosing the proper menu choice. This will display the CSSA Screen. For existing stations the previous values are in place for each field and may be edited.

g. If a closed or inactivated station needs to be reestablished or reactivated and the historical information is not in the database, contact the RCPM for instructions. This selection will be added to the program as the historical database is integrated into the system.

2.4 CSSA Data Entry. The tabbed menu bar across the top of the screen displays the tabs listed in the subparagraphs below. Chapter 7 provides information on lookup values within the fields.

a. To facilitate data entry, the SIR has been subdivided into six tabbed entry areas. Depictions of the screens are included in the description of each area. Exhibit 3-5 depicts the CSSA Screen.

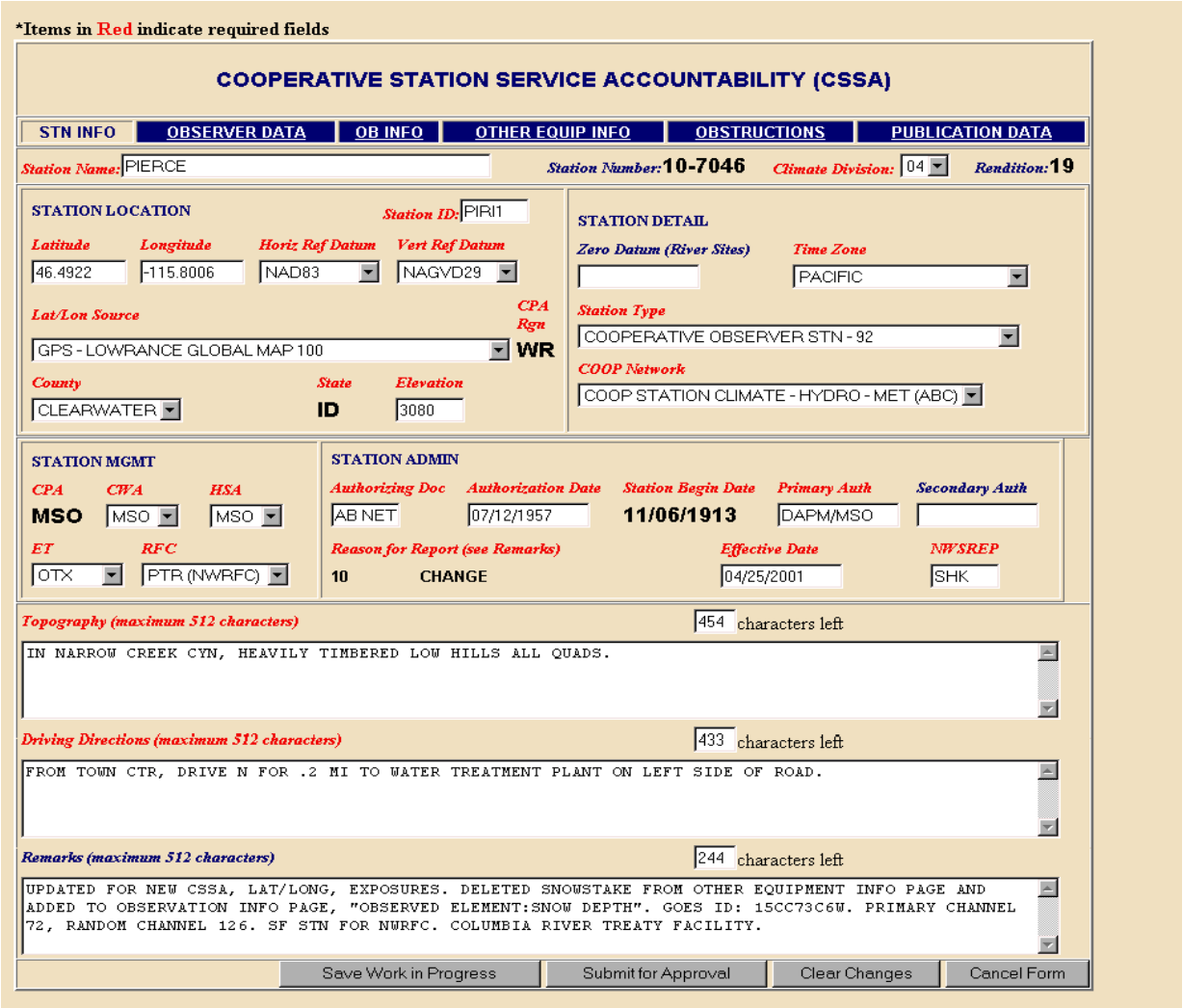


Exhibit 3-5 Cooperative Station Service Accountability (CSSA).

b. Moving between fields should be accomplished by using the *tab* key after entry or editing of fields. Tab key is the preferred method to move between fields on a page. The "Tabs" on the top of the screen and the various buttons on the screen may be selected with the left-hand mouse button or other pointer device button.

c. Throughout Chapters 3, 4, and 5, the various fields will be explained though the use of tables following each field name. Table 3-2, Table Definitions, defines the table parameters.

Field Name	The name of the field.
Method of Entering Data	Methods: 1. Auto fill - The program automatically fills in the data. 2. Pull Down - Select from a pull down menu in the field box. 3. Text - Enter text/number. 4. Date - Enter a date. Date format is always mm/dd/yyyy.
Mandatory Entry	"Yes" for mandatory or "No" for optional as provided in the table. (NOTE: normally these are highlighted in RED on the CSSA screens for mandatory entries and in BLUE for optional.)
Field Description	An explanation of the field specific requirements.
Field Type	The choices are: 1. Text (alphanumeric) 2. Numeric 3. Floating Point Number 4. Date (format mm/dd/yyyy)
Field Length	Maximum length of the field.
Values	Range of entries or menu selection choices. Chapter 7 provides menu selection choices. When there are no specific values this row may be deleted.

Table 3-2. Table Definitions

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2.4.1 STN INFO. The first tab on the CSSA screen, the **STN INFO** tab, provides information on station location and administration. This tab is the default screen whenever the selection is made to access the data entry area. Exhibit 3-5, Cooperative Station Service Accountability (CSSA), also depicts the STN INFO screen.

2.4.1.1 Station Name.

Field Name	Station Name
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	***Existing stations*** – Official Name as it appears on the Station's B-44 or Station Information Report (SIR) and/or B43 form. ***Establishments*** – Select a Primary Name that references the closest city/town or a readily identifiable geographic location from a current edition of the Rand-McNally Atlas. Station names are requested by the WFO and assigned in accordance with WSOH #6. e.g., Kansas City. For new stations being established clearly outside the city limits, **suffix** the Primary Names with both distance and direction to the station from the city center in whole miles and to 16 points of a compass. e.g., Kansas City 8NNW. If desired, a secondary name may follow the Primary Name to provide clarification. e.g., Kansas City NWSTC. ***Re-Activation*** - Assure the Primary Name of the station at reactivation is the same as it was when inactivated.
Field Type	Text
Field Length	80 characters

2.4.1.2 Station Number.

Field Name	Station Number
Method of Entering Data	Auto Fill by the program after rendition 1 is entered.
Mandatory Entry	Yes
Field Description	This number is assigned by NCDC to establish a new station.
Field Type	Text
Field Length	7 characters, format ss-nnnn ss = state number nnnn = index number
Values	ss-nnnn e.g.12-1234

2.4.1.3 Climatic Division.

Field Name	Climatic Division
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	State climatic divisions are assigned by NCDC with the station number **but can change as stations are relocated.** Climatic Division maps appear on the back cover of a state's Climatological Data publication.
Field Type	Text
Field Length	2
Values	01-10

2.4.1.4 Rendition. Rendition is controlled by the program (auto filled). Corrected rejected SIRs will not generate a new rendition number. Rendition number cannot be changed by the NWSREP. If an error in rendition numbering is discovered coordinate the correction to the database with the RCPM.

Field Name	Rendition
Method of Entering Data	Auto Fill
Mandatory Entry	Yes
Field Description	Sequentially entered after every submission. A correction to a preliminary SIR will not increase the rendition number.
Field Type	Numeric
Field Length	4
Values	1 to 9999

2.4.1.5 Station ID. The station identifier is assigned using the National Weather Service Location Identifier system (NWSLI). It is a unique alpha-numeric identifier that is normally 5 digits for cooperative stations but can be 3 digits in case of aviation reporting stations.

Field Name	Station ID (SID)
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	The SID is requested from the NWSLI. Apply for a SID when establishing a new station, per regional directives.
Field Type	Text
Field Length	5

2.4.1.6 Latitude. This is in the station location section of the SIR. Accurate latitude for a station is of paramount importance.

Field Name	Latitude
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	The station latitude is entered to the nearest second or .0000 of a decimal degree based on the primary rain gauge, or other primary instrument if no rain gauge. Latitude may be entered in decimal degrees or Degrees.minutes.seconds. Format: 1. Degrees.minutes.seconds the format is DD.mm.ss**N** (**N**orth or **S**outh) 2. Decimal format is DD.nnnn**N** The program will convert DD.mm.ssN entries. North is a positive value and south is negative. The Federal standard is decimal degrees.
Field Type	Text/Floating Point
Field Length	9

2.4.1.7 Longitude. This is in the station location section of the SIR. Accurate longitude for a station is of paramount importance.

Field Name	Longitude
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	The station longitude is entered to the nearest second or .0000 of a decimal degree based on the primary rain gauge, or other primary instrument if no rain gauge. longitude may be entered in decimal degrees or Degrees.minutes.seconds. Format: 1. Degrees.minutes.seconds the format is DD.mm.ssE (**W**est or **E**ast) 2. Decimal format is DD.nnnnE The program will convert DD.mm.ssE entries. East is a positive value and west is negative. The Federal standard is decimal degrees.
Field Type	Text/Floating Point
Field Length	10

2.4.1.8 Horizontal Reference Datum. Horizontal reference datum is required to be reported/changed when latitude or longitude is changed or a new station is established.

Field Name	Horizontal Reference Datum
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the horizontal reference datum used to determine the spatial fix of the Station. Refer to map legend or setup options in your GPS receiver. All GPS receivers should be set to a horizontal reference datum of NAD83. Every effort should be made to determine the proper datum, select "unknown" when in doubt.
Field Type	Text
Field Length	16
Values	Chapter 7, table 7.2

2.4.1.9 Vertical Reference Datum. Vertical reference datum is required to be reported/changed when elevation is changed or for a new station.

Field Name	Vertical Reference Datum
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the vertical reference datum used to determine the elevation of the station. Do not use unconfirmed GPS elevations. Refer to legend/notes on maps or software used to determine station's elevation and note vertical datum used. Every effort should be made to determine the proper datum, select "unknown" when in doubt.
Field Type	Text
Field Length	16
Values	Chapter 7, table 7.3

2.4.1.10 Lat/Lon Source. Latitude and longitude source is required to be reported/changed for changes to lat/lon information or for new stations.

Field Name	Lat/Lon Source
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the source of latitude and longitude data. If the GPS receiver used is not listed, contact your RCPM to have it added to the CSSA drop down selection list. The "*INITIAL DATABASE LOAD*" entry shall be changed to the correct source with the first update.
Field Type	Numeric
Field Length	3
Values	Chapter 7, table 7.4

2.4.1.11 CPA Region.

Field Name	CPA Rgn - COOP Program Area Region
Method of Entering Data	Auto Fill
Mandatory Entry	Yes
Field Description	NWS Region the station is located in.
Field Type	Text
Field Length	5
Values	ER, WR, CR, AR, PR, or SR

2.4.1.12 **County**.

Field Name	County
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	The county **or equivalent** the station is located in.
Field Type	Text
Field Length	30
Values	Chapter 7, Table 7-26

2.4.1.13 **State**.

Field Name	State
Method of Entering Data	Auto Fill
Mandatory Entry	Yes
Field Description	The state the station is located in.
Field Type	Text
Field Length	2
Values	Chapter 7, Table 7-27

2.4.1.14 **Elevation**.

Field Name	Elevation
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the elevation of the station to the nearest whole foot. ***Do Not*** use GPS elevations. The elevation of the station is the average elevation of the ground in a 20-meter (60ft) circle around the primary rain gauge. Elevations below sea-level are preceded by a minus. **Tower/Rooftops** – This ground elevation also applies to gauges located on towers and/or rooftops. In addition, the distance from the ground to the gauge orifice shall be entered in the gauge's equipment description entered on the OB INFO tab. **River Stage/Lake Level Only** – At stations with no rain gauge, the elevation entered will be the ZERO DATUM of the gauge. **1st & 2nd Order Stations** – The elevation of the official temperature sensor for the station is entered for elevation.
Field Type	Numeric
Field Length	6

2.4.1.15 Zero Datum.

Field Name	Zero Datum
Method of Entering Data	Text
Mandatory Entry	Mandatory only if hydrology data such as river or lake levels are reported by the station.
Field Description	Enter the agreed/published standard elevation of the primary river gauge to the nearest hundredth of a foot. Negative values are allowed. Leave blank if no river or lake hydrology data are reported.
Field Type	Floating Point
Field Length	9.2
Values	0.00 to 999999.99

2.4.1.16 Time Zone.

Field Name	Time Zone
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	The time zone the station is in.
Field Type	Numeric
Field Length	2
Values	Chapter 7, table 7-3

2.4.1.17 **Station Type**.

Field Name	Station Type
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the appropriate station type from the drop down list. Cooperative Weather stations are normally type "**92**", ASOS are type "**06**". If more than one type applies, enter the lowest numeric value.
Field Type	Text
Field Length	2
Values	Chapter 7, table 7-6

2.4.1.18 COOP Network. If a coop is in the "a" network the station is a climatological station and must be published in the CD (PCN and TMP). Each "a" station must have at least one piece of temperature and one piece of precipitation equipment. Stations in the "b" network are maintained to support hydrologic programs and stations in the "c" network support meteorological programs.

Field Name	COOP Network
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the network as shown on an existing B-44, Station Information Report or approved B-43 for the station. Network definitions appear in WSOM Chapter B-17 and WSOH#6.
Field Type	Text
Field Length	16
Values	Chapter 7, table 7-5

2.4.1.19 CPA. The program sets the CPA as a default value based on the username login at initial entry.

Field Name	CPA - Coop Program Area
Method of Entering Data	Auto Fill
Mandatory Entry	Yes
Field Description	The SID of the NWS office responsible for the management of the station.
Field Type	Text
Field Length	5
Values	NWSLI Table

2.4.1.20 CWA. The program sets the CWA as a default value based on the username login. The NWSREP may select a different CWA.

Field Name	CWA - County Warning Area
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the SID of the WFO with assigned warning responsibility for the area in which this station is located.
Field Type	Text
Field Length	5
Values	NWSLI Table

2.4.1.21 HSA. The program sets the HSA as a default value based on the user name logon. The NWSREP may select a different HSA.

Field Name	HSA - Hydrologic Service Area
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the SID of the WFO responsible for hydrology services/support.
Field Type	Text
Field Length	5
Values	NWSLI Table

2.4.1.22 ET. The NWSREP may select an ET if appropriate. This field is left blank only if there is no equipment maintained by an NWS El Tech.

Field Name	ET - Electronic Technician's WFO SID
Method of Entering Data	Pull Down
Mandatory Entry	Yes, if equipment is maintained by ET
Field Description	Select the SID of the electronics technician's office responsible for maintenance of any equipment at the station. **Leave blank only if** no equipment is maintained by an NWS El Tech.
Field Type	Text
Field Length	5
Values	EMIRS Table

2.4.1.23 RFC. The program sets the RFC as a default value based on the user name logon. The NWSREP may select a different RFC.

Field Name	RFC - River Forecast Center
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the SID of the River Forecast Center (RFC) responsible for the area in which the station is located.
Field Type	Text
Field Length	5
Values	NWSLI Table

2.4.1.24 Authorizing Doc.

Field Name	Authorizing Doc
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Indicate the latest document authorizing a change in station equipment, location, network or etc. Normally a WS Form B-43, some stations may have other authorizing documents.
Field Type	Text
Field Length	16

2.4.1.25 Authorization Date. This is in the station administration section of the SIR.

Field Name	Authorization Date
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	The date the authorizing document was approved. Normally the date the authorizing B-43 was approved by Regional Headquarters. The date must be provided if known, otherwise enter unknown.
Field Type	Date (format mm/dd/yyyy)
Field Length	Fixed

2.4.1.26 Station Begin Date.

Field Name	Station Begin Date
Method of Entering Data	Hard coded after rendition 1.
Mandatory Entry	Yes
Field Description	Enter the date the station was established based on Rendition 1 of the station's B-44. Normally refers to the first day the station began reporting data. This is not the observer's date of service as several observers may have provided service since the station began (Rendition #1). Use the format *mm/dd/yyyy*.
Field Type	Date
Field Length	Fixed

2.4.1.27 Primary Auth.

Field Name	Primary Auth - Primary Authority
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Used to indicate the title and name or initials of the person responsible for the entries on the SIR. E.G. HMT/John Doe or MIT/JD
Field Type	Text
Field Length	32

2.4.1.28 **Secondary Auth**.

Field Name	Secondary Auth
Method of Entering Data	Text
Mandatory Entry	No
Field Description	Used to indicate the title and name or initials of the person responsible for reviewing the entries on the SIR. E.G. HMT/John Doe or MIT/JD
Field Type	Text
Field Length	32

2.4.1.29 Effective Date. Effective date and rendition number must change every time a SIR is submitted (except for processing rejected records). The effective date of a new rendition cannot be earlier than the effective date of any previous rendition record.

Field Name	Effective Date
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the effective date that the change(s) relative to this B-44 submission take effect. Use the format mm/dd/yyyy. **For a new station,** effective date refers to the date the first observation is taken/reported from the station. It is not the date of the B-43 authorizing the establishment. **For changes to an existing station,** the effective date refers to the date the change(s) take effect, e.g., a new observer is recruited and trained. The effective date of this change is the date this new observer takes their first observation or e.g., if an MMTS is installed at the station, the effective date is the date the data from the MMTS was first reported.
Field Type	Date
Field Length	Fixed

2.4.1.30 NWSREP.

Field Name	NWSREP - National Weather Service Representative
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	The name or initials of the individual with management responsibility for this station.
Field Type	Text
Field Length	5

2.4.1.31 Topography. Topography describes the type of terrain/vegetation in the vicinity of the station. **Do not** put latitude and longitude (lat/lon) source information in this section.

Field Name	Topography
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Describe the topography within the vicinity of this station. This is a scrolling 512 character free form field with word wrap. Be brief as possible.
Field Type	Text
Field Length	512

2.4.1.32 **Driving Directions**.

Field Name	Driving Directions
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter driving directions to the station, referencing a logical starting point such as highway intersections, landmarks or mile markers. Driving distances shall be entered to the nearest 10^{th} of a mile. This is a scrolling 512 character, free form field.
Field Type	Text
Field Length	512

2.4.1.33 Remarks.

Field Name	Remarks
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Available for any additional information relative to this station which does not appear elsewhere on the SIR. Remove remarks which pertain to previous rendition. Remarks will contain information such as: 1. Clarify the reason the transaction is being submitted, e.g., change observer telephone number. 2. May affect the safety of future visitors, e.g., dangerous dog, hazardous bridge, etc. 3. Might restrict or provide access, e.g., gate locked at 5PM. Key in vehicle glove box. 4. Limited hours available for visitations, e.g., hours of operation are 7AM-4PM Mon-Fri only. 5. Use this area to continue obstruction overflow.
Field Type	Text
Field Length	512

2.4.1.34 Reason for Report. Refer to Chapter 7, table 7-1, for additional information.

Field Name	Reason for Report
Method of Entering Data	Hard Coded after selecting from database screen. Exhibit 3-3.
Mandatory Entry	Yes
Field Description	System generated based on Exhibits 3-2, 3-3 and 3-4 menu selections. Additional comments are required in the remarks section (see Chapter 7, table 7-1)
Field Type	Numeric
Field Length	2

2.4.1.35 Navigation Buttons. There are four navigation buttons at the bottom of the Station Info screen.

Button	**Function/Result**
Save Work in Progress	Places SIR on hold for further action. It is recommended to save work in progress after every tab.
Submit for Approval	Submits draft SIR to workflow process. All entries should be verified before submitting to the next level of approval. If quality control finds an error at this point the program will go to the field with the error. A prompt will be displayed at time of submission to print a draft.
Clear Changes	Clears the changes on the current screen.
Cancel Form *****CAUTION MUST BE FOLLOWED WITH THIS SELECTION*****	For a station newly established by the SIR, it will be **PERMANENTLY PURGED FROM THE DATABASE, ALL INFORMATION ENTERED, INCLUDING THE STATION NUMBER, WILL BE LOST.** For a previously established station, **ALL INFORMATION CHANGED WILL BE PURGED FROM THE DATABASE.**

2.4.2 Observer Data. The second tab on the CSSA screen is the "OBSERVER DATA" tab. This tab provides general information about the COOP station's observer(s). Exhibit 3-6, depicts the Observer Data screen. Field descriptions can be found in table 2.4.2.1 through 2.4.2.22.

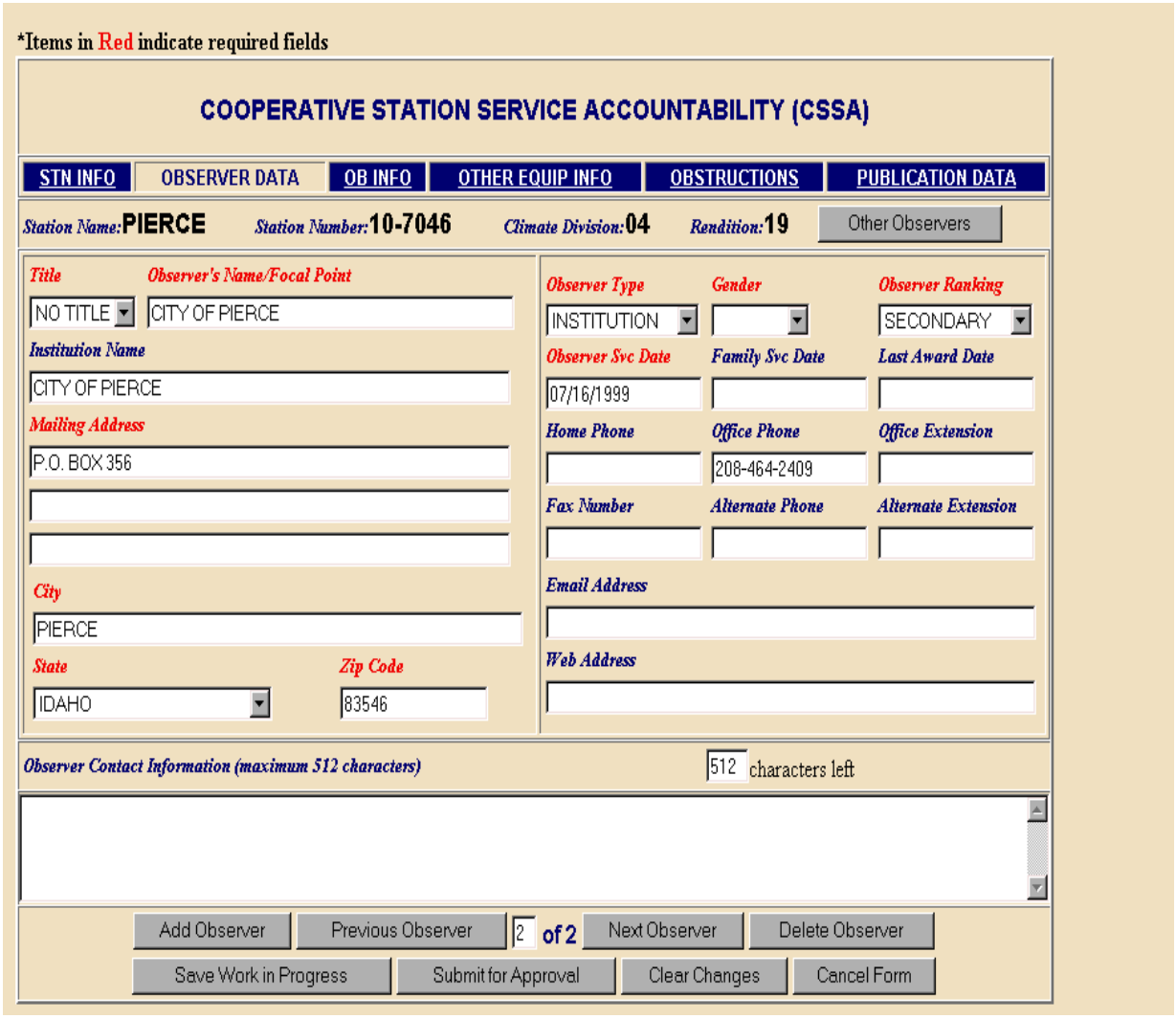


Exhibit 3-6. The Observer Data

a. One primary observer/focal point is required and up to 9 alternate observers may be entered for each station.

b. Even if the primary observer is declared to be an institution, a primary observer/focal point must be provided.

2.4.2.1 Title.

Field Name	Title
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the title of the observer or focal point from pull down list. If there is no title select "**NO TITLE**"
Field Type	Text
Field Length	Variable
Values	Chapter 7, table 7-9

2.4.2.2 Observer's Name/Focal Point.

Field Name	Observers Name/Focal Point
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the full name of the observer or focal point. Nicknames or adopted names should be avoided as much as possible, e.g., enter **Charles** instead of adopted Chuck. For Institutions or Government the name of a focal point shall be provided.
Field Type	Text
Field Length	40

2.4.2.3 Observer Type.

Field Name	Observer Type
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	**Person** - Individuals or private residences where individual awards are to be presented based on 5 year increments, after completing the first 10 years. **INSTITUTION** - Businesses or local government and LOS awards are to be provided on 25 year increments, e.g., water treatment plant, radio station, etc. **GOVERNMENT** - Federal or state government agency not eligible for LOS awards.
Field Type	Text
Field Length	1
Values	Person, Institute or Government

2.4.2.4 Gender.

Field Name	Gender
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select either Male or Female for observer or focal point. Blank may be selected (regional guidelines apply).
Field Type	Text
Field Length	1
Values	Male, Female or blank.

2.4.2.5 **Observer Ranking.**

Field Name	Observer Ranking
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the primary official observer/focal point at the site or select secondary/supplemental for backup observers.
Field Type	Numeric
Field Length	2
Values	Chapter 7, table 7-8

2.4.2.6 **Institution Name.**

Field Name	Institution Name
Method of Entering Data	Text
Mandatory Entry	No
Field Description	Enter the name of the institution or government agency, e.g., ANYTOWN WATER TREATMENT PLANT, USDA SOIL CONSERVATION OFFICE Leave blank for individuals.
Field Type	Text
Field Length	40

2.4.2.7 **Observer Service Date.**

Field Name	Observer Service Date
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	This refers to the date the observer took the first observation. Use mm/dd/yyyy format.
Field Type	Date
Field Length	Fixed

2.4.2.8 **Family Service Date.**

Field Name	Family Service Date
Method of Entering Data	Text
Mandatory Entry	No
Field Description	Enter the date the first member of the family began service in the COOP Program. Use mm/dd/yyyy format.
Field Type	Date
Field Length	Fixed

2.4.2.9 **Last Award Date**.

Field Name	Last Award Date
Method of Entering Data	Text
Mandatory Entry	No
Field Description	Enter the date the last award was presented to the observer/station. If the observer has not received their first longevity award, leave blank. Use mm/dd/yyyy format. The type of award presented should be indicated in the Observer Contact field.
Field Type	Date
Field Length	Fixed

2.4.2.10 **Mailing Address**.

Field Name	Mailing Address
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the mailing address of the observer or institution. Do not use abbreviations. **Do not** enter the observer's *name, institution name, city, state, or zip code* in this field. Enter "none" when no address exits.
Field Type	Text
Field Length	40 per line

2.4.2.11 City.

Field Name	City
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the complete city name for the observer/station's mailing address. DO NOT ENTER THE STATE.
Field Type	Text
Field Length	25

2.4.2.12 State.

Field Name	State
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the state as applies to the observer/station's mailing address.
Field Type	Text
Field Length	2

2.4.2.13 Zip Code.

Field Name	Zip Code
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the zip code of the observer's/station's mailing address. Use format: 12345 or 12345-6789. Report the +four if known.
Field Type	Text
Field Length	10

2.4.2.14 Home Phone.

Field Name	Home Phone
Method of Entering Data	Text
Mandatory Entry	*Mandatory only if Individual*
Field Description	Enter the complete home phone number, including area code, of individual observers. Leave blank if no home phone. Format is 888 888-8888
Field Type	Text
Field Length	12

2.4.2.15 Office Phone.

Field Name	Office Phone
Method of Entering Data	Text
Mandatory Entry	*Mandatory Only if Institution or Government*
Field Description	Enter the complete office phone number, including area code, of the observer or station. May be left blank if the station type is Individual. Format is 888 888-8888
Field Type	Text
Field Length	12

2.4.2.16 Office Extension.

Field Name	Office Extension
Method of Entering Data	Text
Mandatory Entry	No
Field Description	Enter if available.
Field Type	Text
Field Length	8

2.4.2.17 Fax Number.

Field Name	Fax Number
Method of Entering Data	Text
Mandatory Entry	No
Field Description	Enter if available. Format is 888 888-8888
Field Type	Text
Field Length	12

2.4.2.18 Alternate Phone.

Field Name	Alternate Phone
Method of Entering Data	Text
Mandatory Entry	No
Field Description	Enter if available. Format is 888 888-8888
Field Type	Text
Field Length	12

2.4.2.19 Alternate Extension.

Field Name	Alternate Extension
Method of Entering Data	Text
Mandatory Entry	No
Field Description	Enter if available.
Field Type	Text
Field Length	8

2.4.2.20 Email Address.

Field Name	Email Address
Method of Entering Data	Text
Mandatory Entry	No
Field Description	Enter email address if known.
Field Type	Text
Field Length	256

2.4.2.21 Web Address.

Field Name	Web Address
Method of Entering Data	Text
Mandatory Entry	No
Field Description	Enter URL of observer or institution web site.
Field Type	Text
Field Length	128

2.4.2.22 **Observer Contact Information.**

Field Name	Observer Contact Information
Method of Entering Data	Text
Mandatory Entry	No
Field Description	Enter any supplemental information that may be beneficial in contacting the observer/focal point, e.g., focal point's office is on the 2nd floor of the water plant in room 119. **Physical address of observer if different from mailing address.**
Field Type	Text
Field Length	512

2.4.2.23 Navigation Buttons. There are eight navigation buttons at the bottom and one in the upper right of the Observer Data screen.

Button	**Function/Result**
Add Observer	Add a new observer, then enter all information.
Previous Observer	Goes to the previous observer screen.
Next Observer	Goes to the next observer screen. Can go directly to any observer by typing in their assigned number and pressing the tab key.
Delete Observer	Delete the observer and associated information.
Save Work in Progress	Saves SIR to CSSA database on hold without submitting the information. It is recommended to save work in progress after every tab.
Submit for Approval	Submits preliminary SIR to workflow process. All entries should be verified before submitting to the next level of approval. If quality control finds an error at this point the program will go to the field with the error. A prompt will be displayed at time of submission to print a draft.
Clear Changes	Clears the changes on the current screen.
Other Observers - located in upper right corner of tab	Allows user to view the list of observers not on the current screen by clicking on the button.
Cancel Form *****CAUTION MUST BE FOLLOWED WITH THIS SELECTION*****	For a station newly established by the SIR, the SIR will be **PERMANENTLY PURGED FROM THE DATABASE, ALL INFORMATION ENTERED, INCLUDING THE STATION NUMBER, WILL BE REMOVED.** For a previously established station, **ALL INFORMATION CHANGED WILL BE PURGED FROM THE DATABASE**.

2.4.3 OB INFO. The third tab on the CSSA screen is the "OB INFO" tab. Exhibit 3-7, depicts the Ob Info screen. Each field will be described for the Ob Info screen. **NOTE:** To delete the equipment entry select the "delete equipment" navigation button and to delete an observation select the "del" option under the Ob Time column.

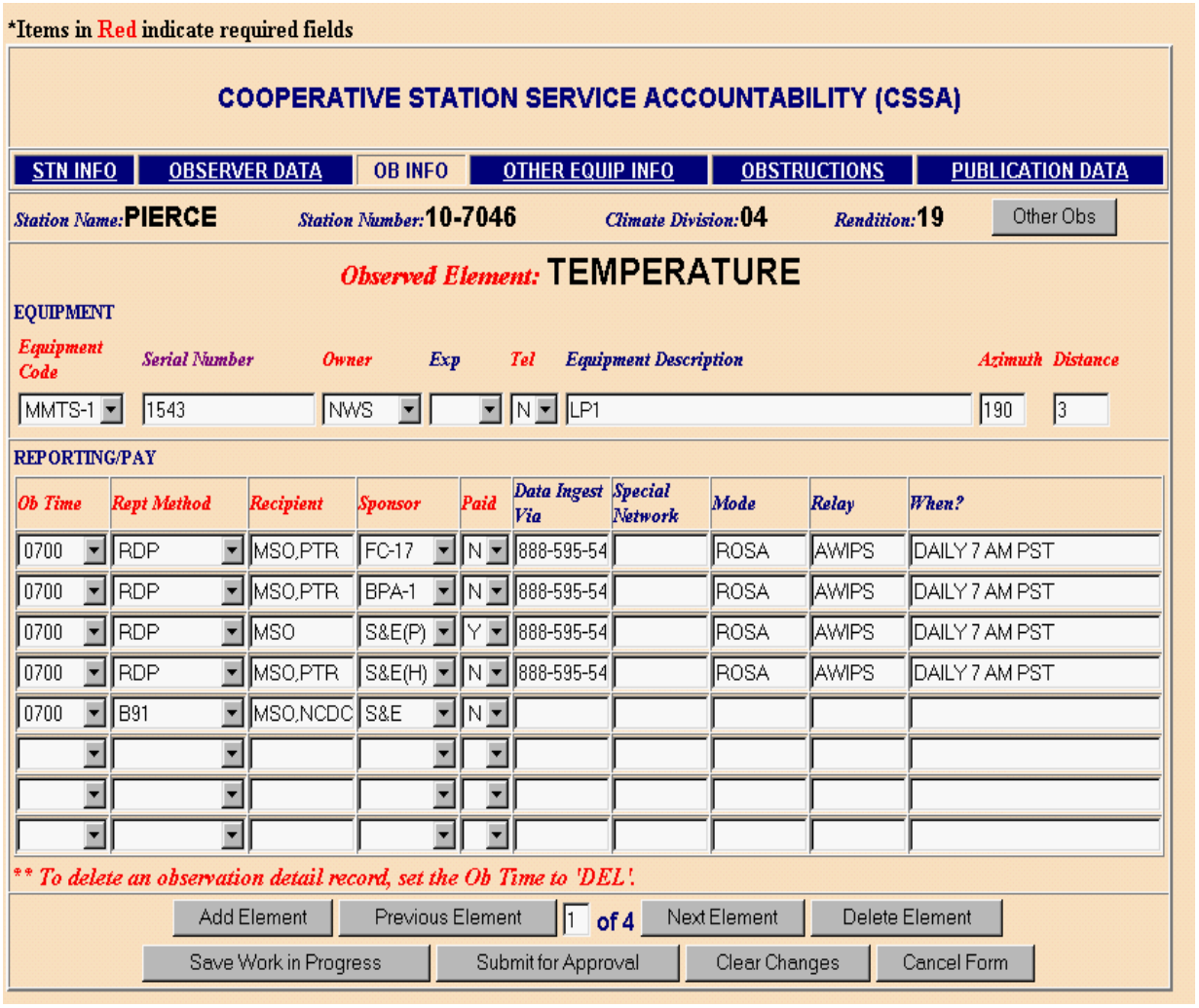


Exhibit 3-7. Ob Info

1. Each station must have at least one observation element, equipment type, and time the element is observed. The report method used (how the element is transcribed/forwarded), the recipient (who gets the data), and the sponsor (who pays for the service) are also documented.

2. Only one primary piece of equipment shall be associated with each observation element. Backup or secondary equipment shall be entered on the Other Equipment Info Tab.

Note: Selecting OB INFO tab for the first time will bring up an EXPOSURE DATA box which shows equipment and obstructions as imported from the old CSSA database. This box is to be used as a tool to facilitate entry of equipment layout and obstructions into the current version of the CSSA using new formatting requirements. Do not close the box as you may need it for future reference. Instead, minimize it. ***Cut and paste data from the pop-up box as required (ctrl C and ctrl V). Observe new CSSA EXPOSURE DATA entry formats!***

2.4.3.1 Observed Element. Select the observation element to be reported. Additional observation elements may be selected using the next element navigation button.

Field Name	Observed Element
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the observation element from the pull down menu.
Field Type	Text
Field Length	16
Values	Chapter 7, table 7-10

2.4.3.2 Equipment Code. Only one equipment code may be selected for each observed element.

Field Name	Equipment Code
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	For the *observed element* being entered/edited, select the appropriate piece of equipment. **Note:** Separate element-specific pull down equipment lists appear for different elements being entered.
Field Type	Text
Field Length	10
Values	Chapter 7, table 7.15

2.4.3.3 Serial Number. The serial number for the primary observing equipment.

Field Name	Serial Number
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Mandatory for F&P, MMTS, NIMBUS, Antenna, and Binary-Decimal Transmitter. Sensor and Display Unit serial numbers are required for the MMTS - list the sensor number first. Other serial numbers, when known, should be entered. If the serial number is unknown enter "UNKNOWN". Examples: F&P gauges serial numbers include the year and month the gauge was manufactured and the gauge number, e.g., F&P Serial number (SN) ZMA1022M77. List Belfort serial numbers in their entirety, e.g., 7603A2217MlOl. For Antenna, e.g., is 34. Binary-Decimal Transmitter, e.g., 6411M33. Refer to Regional guidelines.
Field Type	Text
Field Length	16

2.4.3.4 Owner. The owner of the primary observing equipment.

Field Name	Owner
Method of Entering Data	Pull Down Menu
Mandatory Entry	Yes
Field Description	Select the owner of the specified equipment from the pull down list, e.g., **NWS** = NWS owned **OBSVR** = observer owned, **COE** = US Army Corps of Engineers.
Field Type	Text
Field Length	8
Values	Chapter 7,table 7.16

2.4.3.5 Exp.

Field Name	Exp - Exposure
Method of Entering Data	Pull Down
Mandatory Entry	No
Field Description	Used to indicate equipment exposure for specific equipment located on: **R** - Rooftop, **T** - Tower **S** - Shielded rain gauges, Combinations acceptable, e.g., **RST** = Rooftop, Tower, Shielded. Leave blank if not applicable.
Field Type	Text
Field Length	8
Values	Chapter 7, table 7.17

2.4.3.6 Tel.

Field Name	Tel. - Telemetered
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select Yes **(Y)** or No **(N)** if this specific piece of equipment is telemetered (queried remotely).
Field Type	Text
Field Length	1
Values	Y or N

2.4.3.7 Equipment Description. This field provides further information about the primary observing element equipment.

Field Name	Equipment Description
Method of Entering Data	Text
Mandatory	As provided in the field description.
Field Description	Enter a detailed description of this piece of equipment. Regional policy may require additional descriptions. **Required equipment descriptions:** **Temperature systems** Hygrothermometer. Enter model or the Agency Stock Number (ASN) found in Engineering Handbook No. 1 (EHB-1), Instrumental Equipment Catalog. For example: HO-83 **MMTS-1, MMTS-7 and NIMBUS** - Enter the type of line protection, if any, e.g. **LP1** (Line protection (Grey Box) **LP2** (line protection using inside AC outlet) **LP3** (Non Service Entrance Plan). **F&P - Precip gauges:** Punch Tape (F&P)

	Format Ex: **DCN/NWS Model 3/Mod 6** Gauge Type and Telemetry Status: e.g., **AC or DC.** **DCN** (Battery *without* Telemetry equipment) **DCY** (Battery *with* Telemetry equipment) **ACN** (AC Power *without* Telemetry equip) **ACY** (AC Power *with* Telemetry equipment) Timer: Installed on gauge, e.g., **NWS Model 3 Timer.** Mod #: Most current modification performed on the gauge, e.g. **MOD 6** (Solar Panel & Rechargeable Battery) **MOD 7** (Shaft encoder installed) **MOD 8,9..**(Not yet defined, describe). **UNIV** - Enter type of universal recording rain gauge, pen type, and chart drive gearing, e.g., **6"-12" Dual Traverse/Series 72 GLP/24 hour 2.4" Single Traverse/Capillary/192 hour** **Wire Weight** -Enter the check bar reading to the nearest hundredth of a foot, e.g., **Check Bar: 24.32.** **SF** - Enter the Section Ranges for each section of the Staff River Gauge and mounting location, e.g., **2-6/6-10/10-14 on West Bridge Pier.** **Evaporation Pans/Hook or Fixed Point Gauge** -E.G. MONEL(H) OR MONEL(F) **PALMER/FRONTIER** - Enter the Probe Depth/s/Probe Cover/Soil Type/Slope Dir, e.g., **4"/Bare/Loam/2 degrees NNW.** **SRG -** Enter the type of funnel and measuring tube, e.g., **Fiberglass funnel, plastic tube.** **SNWSTK** - Enter the length/height of the snowstake in whole feet, e.g., **10 ft.** **Storage Gauge** - Enter the can type and length, and the orifice height For example, 42" x 8" can/orifice height - 10.2 feet **Antenna** - Enter the type, e.g., YAGI. **Binary-Decimal Transmitter** - Enter the type, e.g., 5ODBl 014A. **Wind Equipment** - Enter the model number or ASN, e.g., F104D.

Field Type	Text
Field Length	256

2.4.3.8 Azimuth.

Field Name	Azimuth
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the azimuth from the primary rain gauge or other primary observing equipment if there is no rain gauge. Enter the azimuth in whole degrees TRUE. **Note:** Enter a 3 digit azimuth from the primary gauge, e.g., SRG is primary, azimuth = **000**, MMTS azimuth = 103. **NOTE:** Azimuth for SRG can only be 000 ***Rain gauge priority list:*** *SRG standard rain gauge* *Recording Rain Gauge (F&P, Univ or HTP)* *4 inch plastic rain gauge (PLASTIC)* *Tipping bucket rain gauge (TB)*
Field Type	Text
Field Length	3
Values	000-360

2.4.3.9 Dist.

Field Name	Dist - Distance
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	For each azimuth entry, enter a corresponding distance in feet to this specific piece of equipment. e.g., Primary gauge distance = 0, MMTS distance = 012. **NOTE:** Range for SRG can only be 0
Field Type	Text
Field Length	4
Values	0-9999

2.4.3.10 Ob Time.

Field Name	Ob Time - Observation Time
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the local time the element is observed using a 24 hour time convention ranging from 0001 to 2400. Recording precipitation gauges should be entered as **"MID".** Manual observations taken at midnight should be entered as 2400. **SR** = Sunrise, **SS** = Sunset, **VAR** = Variable (nonspecific ob time).
Field Type	Text
Field Length	6
Values	Chapter 7, table 7.11

2.4.3.11 Rept Method. This entry represents how the observed data is transcribed or forwarded to the NWS.

Field Name	Rept Method
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the form on which the element is recorded or the method in which reports are transmitted. Elements recorded on a form and also transmitted by the observer are documented as 2 separate elements, e.g., **B91** (Entered by observer on B91 form) **RDP** (digital report sent, e.g., ROSA, Web based)
Field Type	Text
Field Length	16
Values	Chapter 7, table 7.12

2.4.3.12 Recipient. Enter the SID of the WFO that receives the observation data. Forms forwarded to NCDC shall have the WFO SID followed by a comma and NCDC.

Field Name	Recipient
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the SID of the WFO that is the initial recipient of this observed element, e.g., **EAX**. Forms forwarded to NCDC shall have the WFO SID followed by a comma and NCDC, e.g., EAX,NCDC, HNL,NCDC. ROSA reports - The SID of the WFO that is identified in the PIL of the RR3 product, e.g., RR3 PIL of NEWRR3LCH, SID entry should be LCH.
Field Type	Text
Field Length	16

2.4.3.13 Sponsor. Select the sponsor corresponding to the institution or agency supporting the collection of data at the COOP station.

Field Name	Sponsor
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the corresponding sponsor code that represents the funding for taking, collection, and/or transmission of this element, e.g., **S&E(H)** - NWS hydrology funding. **FC-6** - Flood Control Network 6, Yazoo River funded. **FC-1** - NWS S&E funded Recording Rain Gauge Network.
Field Type	Text
Field Length	8
Values	Chapter 7, table 7.13

2.4.3.14 Paid.

Field Name	Paid
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Indicate **"Y"** Yes, if the observer is paid for performing this particular observation or service element.
Field Type	Text
Field Length	1
Values	Y or N

2.4.3.15 Data Ingest Via. Enter a telephone number, GOES transmitting frequency, or other method used to access the observed data. The field should be blank for elements not accessed by remote collection methods.

Field Name	Data Ingest Via
Method of Entering Data	Text
Mandatory Entry	Mandatory only for **RDP** (reported digitally from observer), **REP** (reported manually from observer), **TEL** (Telemetered data), and **ADP** (Data reported electronically to NCDC).
Field Description	The telephone number, radio frequency or Internet URL of the data collection system used by the observer/station, e.g., **816-555-5555** (phone number called by observer) **816-999-9999** (Primary Phone number of ROSA computer called by observer) 206-123-4567 (Primary Phone number called by the CADAS/HADS computer) **102.45 mhz** (Radio frequency used to report data) **www.crh.noaa.gov/wxcoder** Internet address.
Field Type	Text
Field Length	16

2.4.3.16 Spec. Network. If an observation record is in a special network, the network name or identification should be provided. Special networks have special funding or are a result of a special project.

Field Name	Spec. Network - Special Network
Method of Entering Data	Text
Mandatory Entry	No
Field Description	Indicate any special network in which this element is being utilized, e.g., **CRN** (Climate Reference Network). **HCN** (Historical Climate Network)
Field Type	Text
Field Length	16
Values	Separate values with a comma.

2.4.3.17 Mode. Enter the method the data is initially collected for further dissemination, e.g., radio, phone, GOES, computer, Internet, etc.

Field Name	Mode
Method of Entering Data	Text
Mandatory Entry	Mandatory only for RDP, REP, TEL, and ADP.
Field Description	e.g.,**ROSA** (ROSA reports entered via telephone), **WEB** (reports via Internet, WXCODER), **RADIO** (Reports transmitted by radio).
Field Type	Text
Field Length	16
Values	Separate values with a Comma

2.4.3.18 Relay. The primary NWS user should be entered in the Recipient field. Any automated functions that further relay the data via radio relays or gateways may be noted.

Field Name	Relay
Method of Entering Data	Text
Mandatory Entry	Mandatory only for RDP, REP, TEL, and ADP.
Field Description	Means used to ingest data into NWS systems and operations, e.g., **AWIPS, HADS, GOES.**
Field Type	Text
Field Length	16
Values	Separate values with a comma.

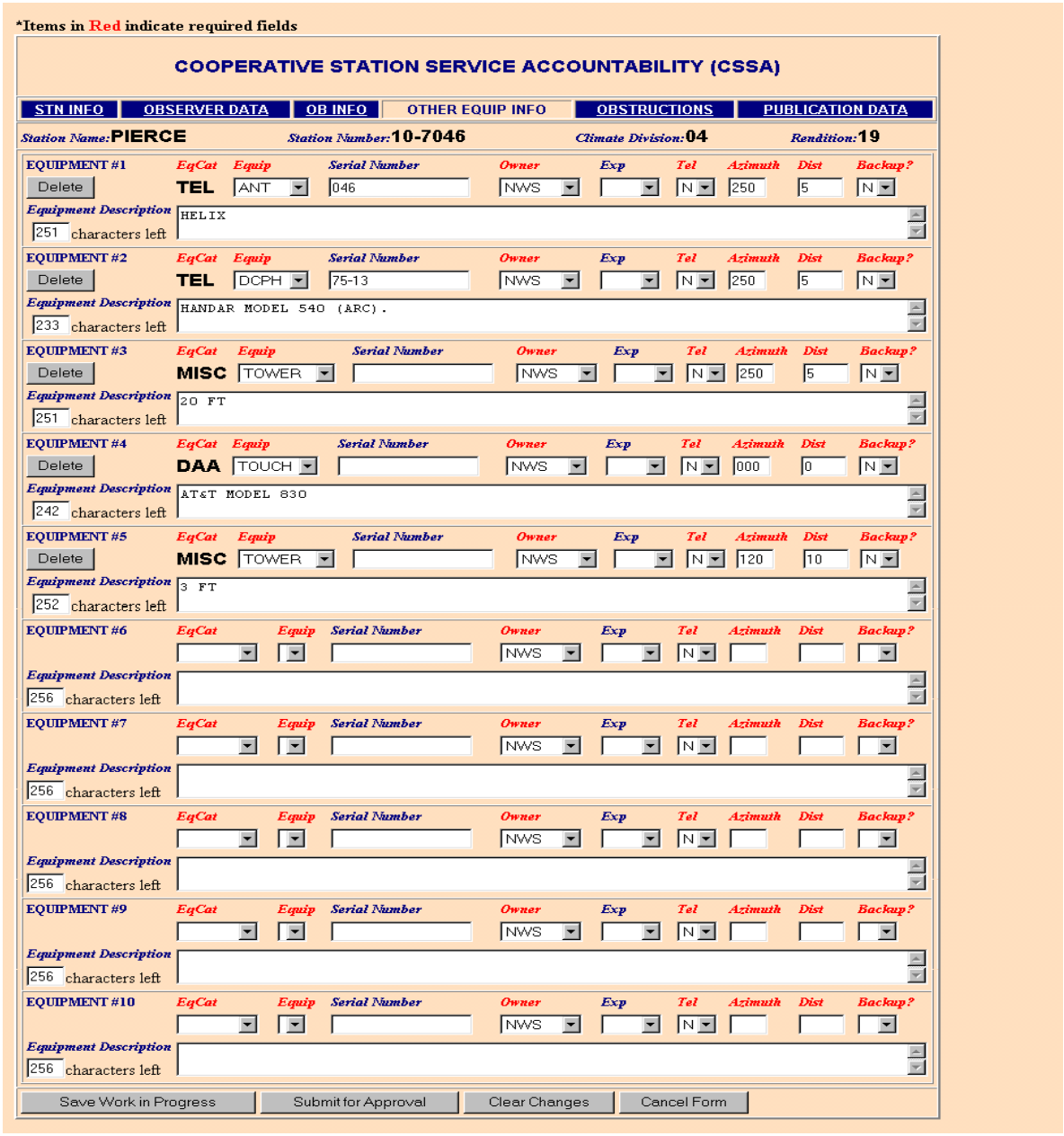
2.4.3.19 When. Enter the frequency the data is collected.

Field Name	When
Method of Entering Data	Text
Mandatory Entry	Mandatory only for RDP, REP, TEL, and ADP report methods.
Field Description	How often the data are relayed to the recipient, e.gs., **Daily, Event, or 7PM if river stage above 12'.**
Field Type	Text
Field Length	64

2.4.3.20 Navigation Buttons. There are eight navigation buttons at the bottom and one in the upper right of the Ob Info screen.

Button	**Function/Result**
Add Element	Add a new element, then enter all information.
Previous Element	Go to the previous element screen
Next Element	Go to the next element screen
Delete Element	Delete the element and associated information. The deletion occurs at the time of SIR approval.
Save Work in Progress	Saves SIR to CSSA database on hold without submitting the information. It is recommended to save work in progress after every tab.
Submit for Approval	Submits preliminary SIR to workflow process. All entries should be verified before submitting to the next level of approval. If quality control finds an error at this point the program will go to the field with the error. A prompt will be displayed at time of submission to print a draft.
Clear Changes	Clears the changes on the current screen.
Cancel Form *****CAUTION MUST BE FOLLOWED WITH THIS SELECTION*****	For a station newly established by the SIR, the SIR will be **PERMANENTLY PURGED FROM THE DATABASE, ALL INFORMATION ENTERED, INCLUDING THE STATION NUMBER, WILL BE REMOVED.** For a previously established station, **ALL INFORMATION CHANGED WILL BE PURGED FROM THE DATABASE.**
Other Obs - Located in the upper right corner of the tab	Allows user to view the list of elements not on the current screen by clicking on the button.

2.4.4 Other Equipment Info. The fourth tab on the CSSA screen is the "OTHER EQUIP INFO" tab. This tab is used to document equipment as backup or secondary equipment to support the observations. Exhibit 3-8, depicts the OTHER EQUIP INFO screen. Each field will be described for the other equipment



information screen.

Exhibit 3-8. Other Equip Info

2.4.4.1 EqCat. This is the backup or secondary equipment used for an observation or its transmission

Field Name	EqCat - Equipment Category
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select an observation category for backup, secondary, or dissemination equipment used at this site, e.g., **TEMP** (CRS with MXMN as backup to an MMTS)
Field Type	Text
Field Length	10
Values	Chapter 7, table 7.14

2.4.4.2 Equip. This is the actual piece of equipment used as backup or secondary to the primary observing element(s).

Field Name	Equip - Equipment
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the actual equipment used as backup or secondary, e.g., **CRS.**
Field Type	Text
Field Length	10
Values	Chapter 7, table 7.15

2.4.4.3 Serial Number. This is the serial number for the equipment selected in Chapter 3, paragraph 2.4.4.2.

Field Name	Serial Number
Method of Entering Data	Text
Mandatory Entry	Mandatory for F&P, MMTS, Antenna, and Binary-Decimal Transmitter. Sensor and Display Unit serial numbers are required for MMTS - list Sensor serial number first. Refer to Regional Guidelines
Field Description	Enter the serial number for equipment. If the serial number is unknown enter "UNKNOWN". See Chapter 3, paragraph 2.4.3.3, for additional instructions.
Field Type	Text
Field Length	16

2.4.4.4 Owner.

Field Name	Owner
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the owner of the equipment, e.g., OBSVR for observer owned.
Field Type	Text
Field Length	8
Values	Chapter 7, table 7.16

2.4.4.5 **Exp**.

Field Name	Exp - Exposure
Method of Entering Data	Pull Down
Mandatory Entry	No
Field Description	Used to indicate equipment exposure for specific equipment located on: **R** - Rooftop, **T** - Tower **S** - Shielded rain gauges, Combinations acceptable, e.g., **RST** = Rooftop, Tower, Shielded. Leave blank if not applicable.
Field Type	Text
Field Length	8
Values	Chapter 7, table 7.17

2.4.4.6 **Tel**.

Field Name	Tel - Telemetered
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select Yes (Y)if this specific piece of equipment is telemetered.
Field Type	Text
Field Length	1
Values	Y or N

2.4.4.7 **Azimuth**.

Field Name	Azimuth
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the azimuth from the primary rain gauge or other primary observing equipment if there is no rain gauge. Enter the azimuth in whole degrees TRUE. **Note:** Enter a 3 digit azimuth from the primary gauge, e.g.,MMTS azimuth = 103. **NOTE:** Azimuth for SRG can only be 000
Field Type	Text
Field Length	3
Values	000-359

2.4.4.8 **Dist**.

Field Name	Dist - Distance
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	For each azimuth entry, enter a corresponding distance in feet to this specific piece of equipment. e.g.,MMTS distance = 012 or 12. **NOTE:** Range for SRG can only be 0
Field Type	Text
Field Length	4
Values	0-9999

2.4.4.9 **Backup**.

Field Name	Backup
Method of Entering Data	Pull down
Mandatory	Yes
Field Description	Select "Y" if this is backup to the primary observing equipment.
Field Type	Text
Field Length	1
Value	Y or N

2.4.4.10 **Equipment Description**.

Field Name	Equipment Description
Method of Entering Data	Text
Mandatory	As provided in the field description.
Field Description	Enter a detailed description of this piece of equipment. Regional policy may require additional descriptions. **Required equipment descriptions:** **Temperature systems** Hygrothermometer. Enter model or the Agency Stock Number (ASN) found in Engineering Handbook No. 1 (EHB-1), Instrumental Equipment Catalog. For example: HO-83 **MMTS-1 & MMTS-7** - Enter the type of line protection, if any, e.g. **LP1** (Line protection (Grey Box) **LP2** (line protection using inside AC outlet) **LP3** (Non Service Entrance Plan). **F&P - Precip gauges:** Punch Tape (F&P) Format Ex: **DCN/NWS Model 3/Mod 6**

Field Name	Equipment Description
	Gauge Type and Telemetry Status: e.g., **AC or DC.** **DCN** (Battery *without* Telemetry equipment) **DCY** (Battery *with* Telemetry equipment) **ACN** (AC Power *without* Telemetry equip) **ACY** (AC Power *with* Telemetry equipment) Timer: Installed on gauge, e.g., **NWS Model 3 Timer.** Mod #: Most current modification performed on the gauge, e.g. **MOD 6** (Solar Panel & Rechargeable Battery) **MOD 7** (Shaft encoder installed) **MOD 8,9..**(Not yet defined, describe). **UNIV** - Enter type of universal recording rain gauge, pen type, and chart drive gearing, e.g., **6"-12" Dual Traverse/Series 72 GLP/24 hour 2.4" Single Traverse/Capillary/192 hour Wire Weight** -Enter the check bar reading to the nearest hundredth of a foot, e.g., **Check Bar: 24.32.** **SF** - Enter the Section Ranges for each section of the Staff River Gauge and mounting location, e.g., **2-6/6-10/10-14 on West Bridge Pier.** **Evaporation Pans/Hook or Fixed Point Gauge** - E.G. MONEL(H) OR MONEL(F) **PALMER/FRONTIER** - Enter the Probe Depth/s/Probe Cover/Soil Type/Slope Dir, e.g., **4"/Bare/Loam/2 degrees NNW.** **SRG -** Enter the type of funnel and measuring tube, e.g., **Fiberglass funnel, plastic tube.** **SNWSTK** - Enter the length/height of the snowstake in whole feet, e.g., **10 ft.** **Storage Gauge** - Enter the can type and length, and the orifice height For example, 42" x 8" can/orifice height - 10.2 feet **Antenna** - Enter the type, e.g., YAGI. **Binary-Decimal Transmitter** - Enter the type, e.g., 5ODBl 014A. **Wind Equipment** - Enter the model number or ASN, e.g., F104D.

Field Name	Equipment Description
Field Type	Text
Field Length	256

2.4.4.11 Navigation Buttons. There are four navigation buttons at the bottom of the Other Equipment Info screen.

Button	**Function/Result**
Save Work in Progress	Saves SIR to CSSA database on hold without submitting the information. It is recommended to save work in progress after every tab.
Submit for Approval	Submits preliminary SIR to workflow process. All entries should be verified before submitting to the next level of approval. If quality control finds an error at this point the program will go to the field with the error. A prompt will be displayed at time of submission to print a draft.
Clear Changes	Clears the changes on the current screen.
Cancel Form *****CAUTION MUST BE FOLLOWED WITH THIS SELECTION*****	For a station newly established by the SIR, the SIR will be **PERMANENTLY PURGED FROM THE DATABASE, ALL INFORMATION ENTERED, INCLUDING THE STATION NUMBER, WILL BE REMOVED.** For a previously established station, **ALL INFORMATION CHANGED WILL BE PURGED FROM THE DATABASE.**
Delete Button - located on left side of page next to each equipment entry	Click on this button to delete the associated equipment entry

2.4.5 Obstructions. The fifth tab on the CSSA screen is the "OBSTRUCTIONS" tab. Definitions for obstructions are found in WSOM Chapter B-11, Appendix D. Exhibit 3-9, depicts the Obstructions screen.

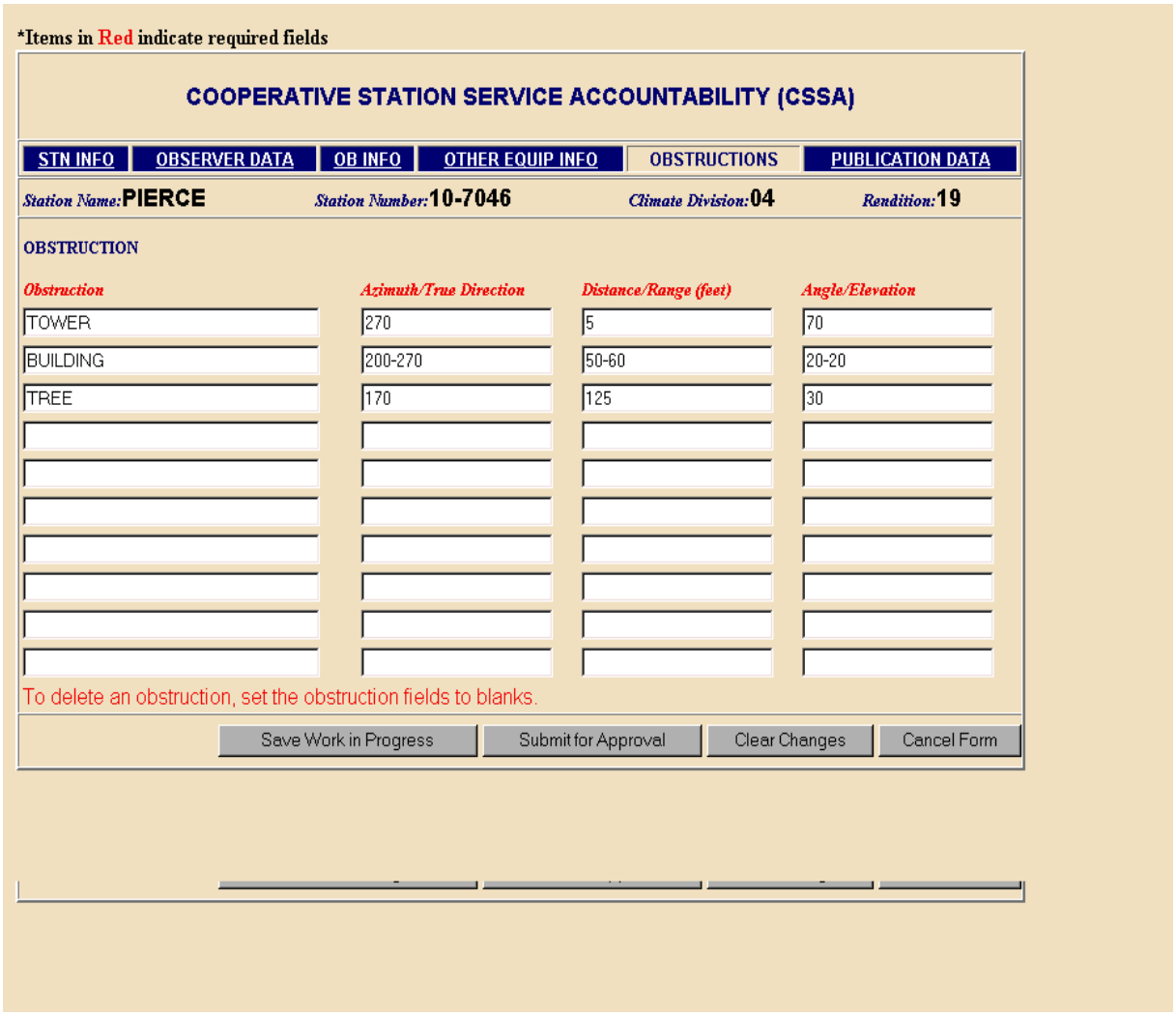


Exhibit 3-9. Obstructions

2.4.5.1 **Obstruction**.

Field Name	Obstruction
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Document all potential obstructions and the exposure information for items within 200 feet of the primary gauge. Other obstructions beyond the 200 feet may be documented if they will potentially effect the data. e.g., **Tower, BLDG, TREE** If there are no obstructions, leave this field blank. **NOTE:** *When documenting obstructions, there must be corresponding entries in Azimuth, Distance/Range, and Angle to match the obstruction(s) listed. Every Azimuth/True Direction entry must have corresponding Distance/ Range entries as well as corresponding Angle entries.*
Field Type	Text
Field Length	32
Values	variable

2.4.5.2 **Azimuth/True Direction**.

Field Name	Azimuth/True Direction
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	From the primary gauge, enter the TRUE Azimuth direction in whole degrees (3 digits) for each obstruction or exposure entry (tree) or group (tree line) starting from north and proceeding clockwise around the gauge, e.g., **270** (for the TOWER), **200-270** (for the BUILDING) **170**(Tree) Azimuth ranges are not to exceed 90 degrees total. If range exceeds 90 degrees of the horizon, break it up into entries separated by a dash. See split tree line example above. **ALQDS is not to be used.**
Field Type	Text
Field Length	32

2.4.5.3 **Distance/Range**.

Field Name	Distance/Range
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	From the primary gauge enter the corresponding distance in whole feet for **every** azimuth entry. Distance entries shall correspond with associated azimuth entries, e.g., **5** (for the TOWER) **50-60** (for the BUILDING) **125** (Tree)
Field Type	Text
Field Length	32

2.4.5.4 **Angle**.

Field Name	Angle
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Mandatory - From the primary gauge enter a corresponding elevation angle in whole degrees (2 digits) for every obstruction/exposure azimuth/distance entry. Angles are to be taken from the top of the primary gauge, e.g., **70** (for the TOWER) **20-20**(for the BUILDING) **30**(Tree)
Field Type	Text
Field Length	32
Values	0-90

2.4.5.5 Navigation Buttons. There are four navigation buttons at the bottom of the Obstructions screen.

Button	**Function/Result**
Save Work in Progress	Saves SIR to CSSA database on hold without submitting the information. It is recommended to save work in progress after every tab.
Submit for Approval	Submits preliminary SIR to workflow process. All entries should be verified before submitting to the next level of approval. If quality control finds an error at this point the program will go to the field with the error. A prompt will be displayed at time of submission to print a draft.
Clear Changes	Clears the changes on the current screen.
Cancel Form *****CAUTION MUST BE FOLLOWED WITH THIS SELECTION*****	For a station newly established by the SIR, the SIR will be **PERMANENTLY PURGED FROM THE DATABASE, ALL INFORMATION ENTERED, INCLUDING THE STATION NUMBER, WILL BE REMOVED.** For a previously established station, **ALL INFORMATION CHANGED WILL BE PURGED FROM THE DATABASE**.

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2.4.6 Publication Data. The sixth tab on the CSSA screen is the "PUBLICATION DATA" tab. This tab indicates how NCDC will publish the data and should not be confused with the data dissemination method documented on the "OBS INFO" screen. Exhibit 3-10, depicts the Publication Data screen.

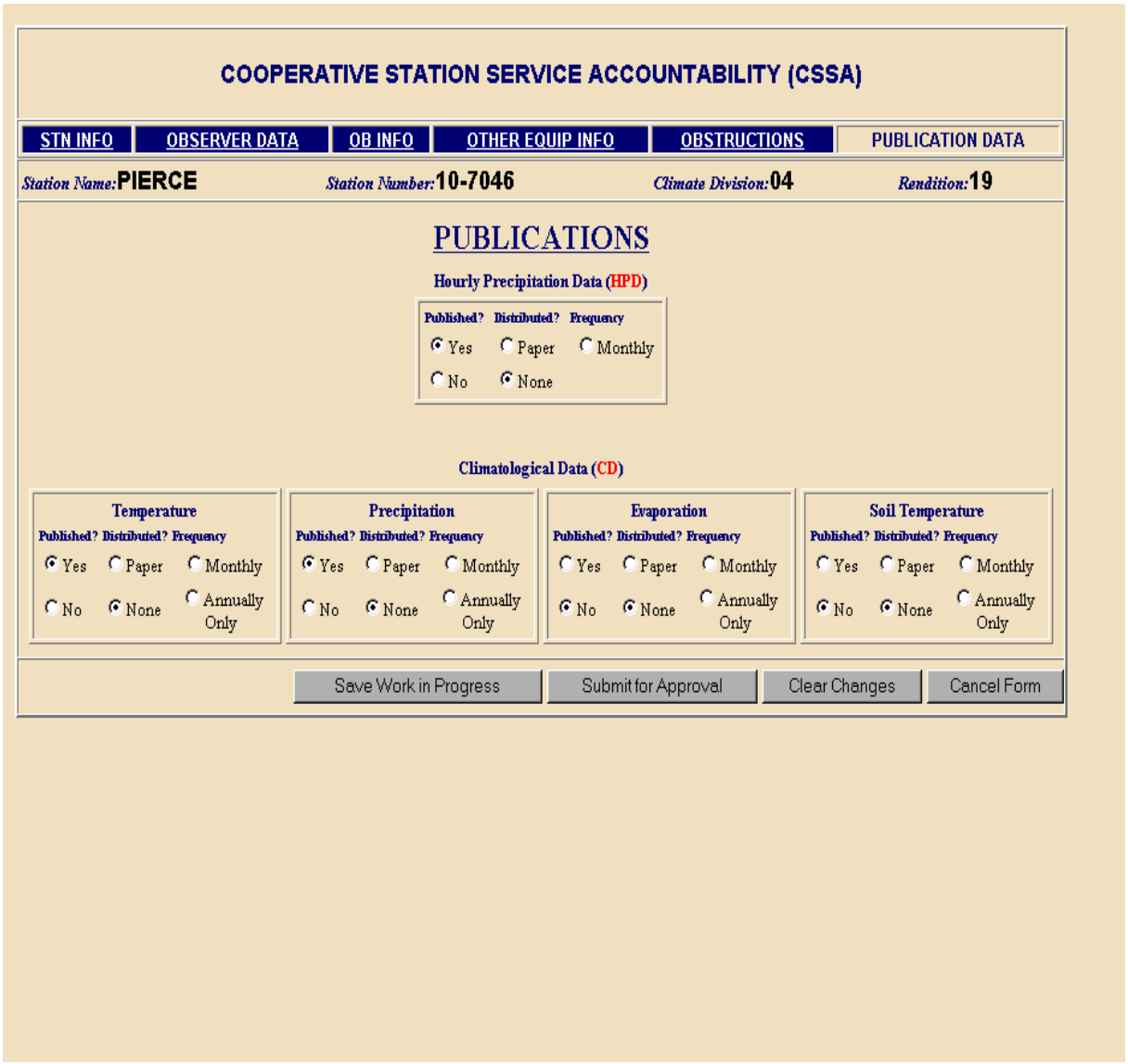

Exhibit 3-10. Publication Data

NOTE: If publication status changes a statement is required in the remark section of the Station Info Tab.

2.4.6.1 HPD. This selection determines whether the observation data should be published in the HPD, and if so, if the observer receives publication in the mail and how often. Check the boxes in accordance with guidance in the table below.

Field Name	HPD
Published	Check "YES" if the hourly precipitation data is published in the HPD. Check "NO" if unpublished.
Distributed	Check "PAPER" if the HPD publication is distributed to the observer. Check "NONE" if the observer does not desire to be on a distribution list for the HPD data.
Frequency	Check "MONTHLY" if the published hourly precipitation data is distributed to the observer monthly.

2.4.6.2 CD. This is the summary of the day publication information for the climatic data (CD) summary publications.

a. Temperature. This selection determines whether the temperature data should be published in the CD, and if so, if the observer receives the publication in the mail and how often.

Field Name	Temperature
Published	Check "YES" if the summary of the day temperature data is published in the CD publications. Check "NO" if the answer is negative
Distributed	Check "PAPER" if the published summary of the day temperature data (CD) is distributed to the observer. Check "NONE" if the observer does not desire to be on a distribution list for the CD data.
Frequency	Check "MONTHLY" if the CD with temperature summary of the day data is distributed to the observer monthly. Check "ANNUALLY ONLY" if the CD with Temperature summary of the day data is distributed to the observer annually.

b. Precipitation. This selection determines whether the precipitation data should be published in the CD, and if so, if the observer receives the publication in the mail and how often.

Field Name	Precipitation
Published	Check "YES" if the summary of the day precipitation data is published in the CD publications. Check "NO" if the answer is negative.
Distributed	Check "PAPER" if the published summary of the day precipitation data (CD) is distributed to the observer. Check "NONE" if the observer does not desire to be on a distribution list for the CD data.
Frequency	Check "MONTHLY" if the CD with precipitation summary of the day data is distributed to the observer monthly. Check "ANNUALLY ONLY" if the CD with precipitation summary of the day data is distributed to the observer annually.

b. Evaporation. This selection determines whether the evaporation data should be published in the CD, and if so, if the observer receives the publication in the mail and how often.

Field Name	Evaporation
Published	Check "YES" if the summary of the day evaporation data is published in the CD publications. Check "NO" if the answer is negative.
Distributed	Check "PAPER" if the published summary of the day evaporation data (CD) is distributed to the observer. Check "NONE" if the observer does not desire to be on a distribution list for the CD data.
Frequency	Check "MONTHLY" if the CD with evaporation summary of the day data is distributed to the observer monthly. Check "ANNUALLY ONLY" if the CD with evaporation summary of the day data is distributed to the observer annually.

c. <u>Soil Temperature</u>. This selection determines whether the soil temperature data should be published in the CD, and if so, if the observer receives the publication in the mail and how often.

Field Name	Soil Temperature
Published	Check "YES" if the summary of the day soil temperature data is published in the CD publications. Check "NO" if the answer is negative.
Distributed	Check "PAPER" if the published summary of the day soil temperature data (CD) is distributed to the observer. Check "NONE" if the observer does not desire to be on a distribution list for the CD data.
Frequency	Check "MONTHLY" if the CD with soil temperature summary of the day data is distributed to the observer monthly. Check "ANNUALLY ONLY" if the CD with soil temperature summary of the day data is distributed to the observer annually.

2.4.6.3 Navigation Buttons. There are four navigation buttons at the bottom of the Publication Information screen.

Button	**Function/Result**
Save Work in Progress	Saves SIR to CSSA database on hold without submitting the information. It is recommended to save work in progress after every tab.
Submit for Approval	Submits preliminary SIR to workflow process. All entries should be verified before submitting to the next level of approval. If quality control finds an error at this point the program will go to the field with the error. A prompt will be displayed at time of submission to print a draft.
Clear Changes	Clears the changes on the current screen.
Cancel Form *****CAUTION MUST BE FOLLOWED WITH THIS SELECTION*****	For a station newly established by the SIR, the SIR will be **PERMANENTLY PURGED FROM THE DATABASE, ALL INFORMATION ENTERED, INCLUDING THE STATION NUMBER, WILL BE REMOVED.** For a previously established station, **ALL INFORMATION CHANGED WILL BE PURGED FROM THE DATABASE.**

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3. ASOS Locations Designated as COOP Stations. Some automated surface observation (ASOS) locations have been assigned COOP Station numbers. COOP station numbers are assigned to all stations whose data is published in the CD. This section of Chapter 3, will provide information on data entry specific to the ASOS.

3.1 ASOS Menu Selection. Select *Establish/Edit ASOS Station Data* from the CSSA Main Menu. Enter the station number at the prompt. Exhibits 3-3 or 3-2 will be displayed. Select the appropriate menu choice and if applicable complete the SIR following instructions in Chapter 3, paragraph 2.4. Chapter 3, paragraph 3.2, provides reporting criteria specific to the ASOS.

3.2 Reporting Criteria for ASOS in the CSSA.

a. ASOS locations assigned COOP station numbers shall be entered into the CSSA database.

b. The fields for the ASOS portion of the CSSA should follow the rules in Chapter 3, paragraph 2.4.

c. The elevation for the ASOS is the elevation of the ASOS primary sensor group. Elevation is available in the site survey book normally on page 5.

d. Remarks should include information about the ASOS commissioning and backup equipment. For example, "ASOS site commissioned 03/01/1994." Commissioning date comment is only required on initial rendition entering ASOS into the CSSA.

e. The publication screen entries should report that the temperature and precipitation are published in the CD and the hourly precipitation is published in the HPD. Soil temperature and evaporation data may be added for staffed ASOS sites.

f. Exhibits 3-11 to 3-14 are examples of entries in the Station Info tab and the Ob Info tab.

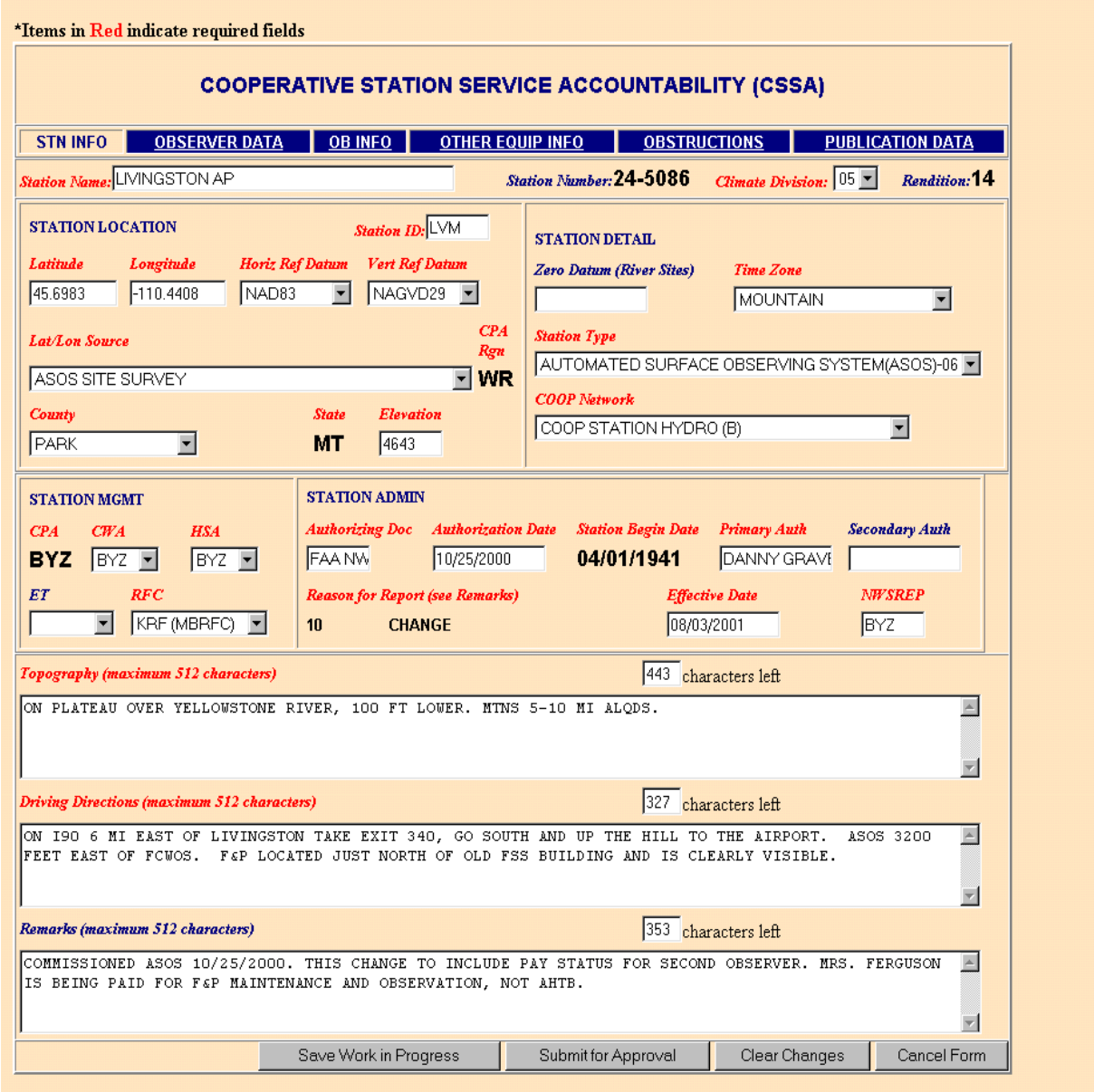

Exhibit 3-11 ASOS STN INFO Tab

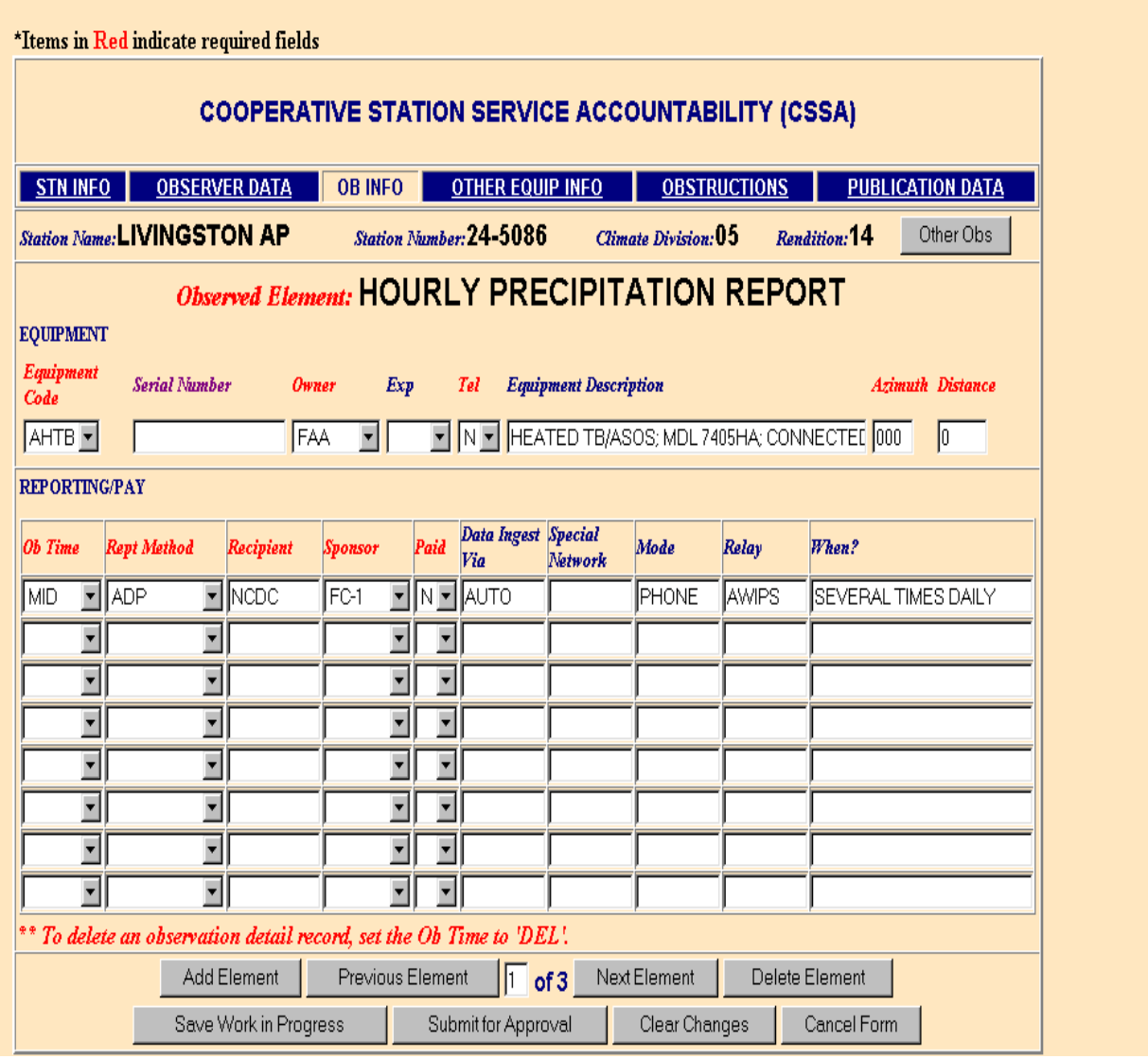

Exhibit 3-12 ASOS OB INFO Tab Entry for the Tipping Bucket

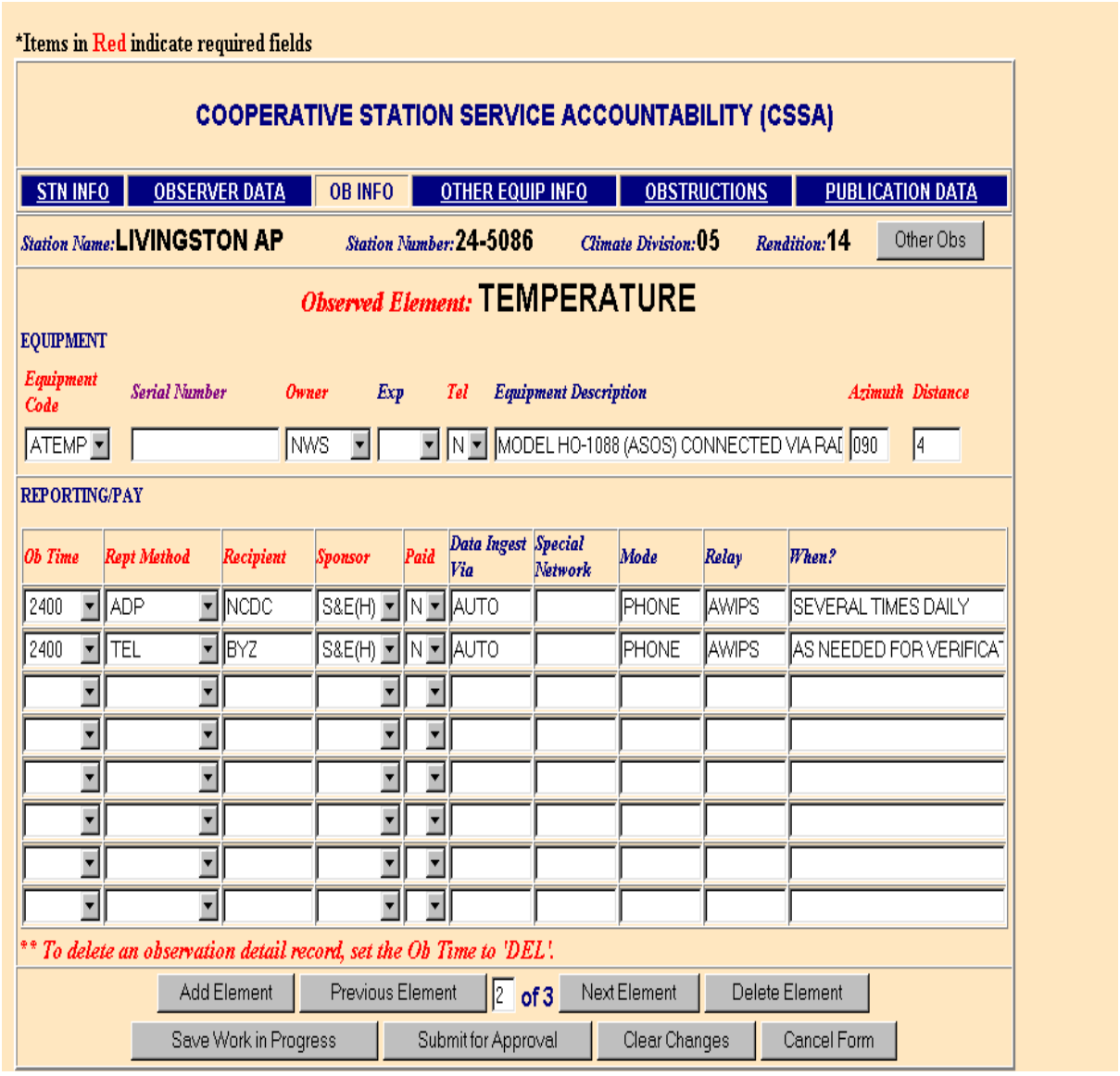

Exhibit 3-13 ASOS OB INFO Tab for the Temperature Entry

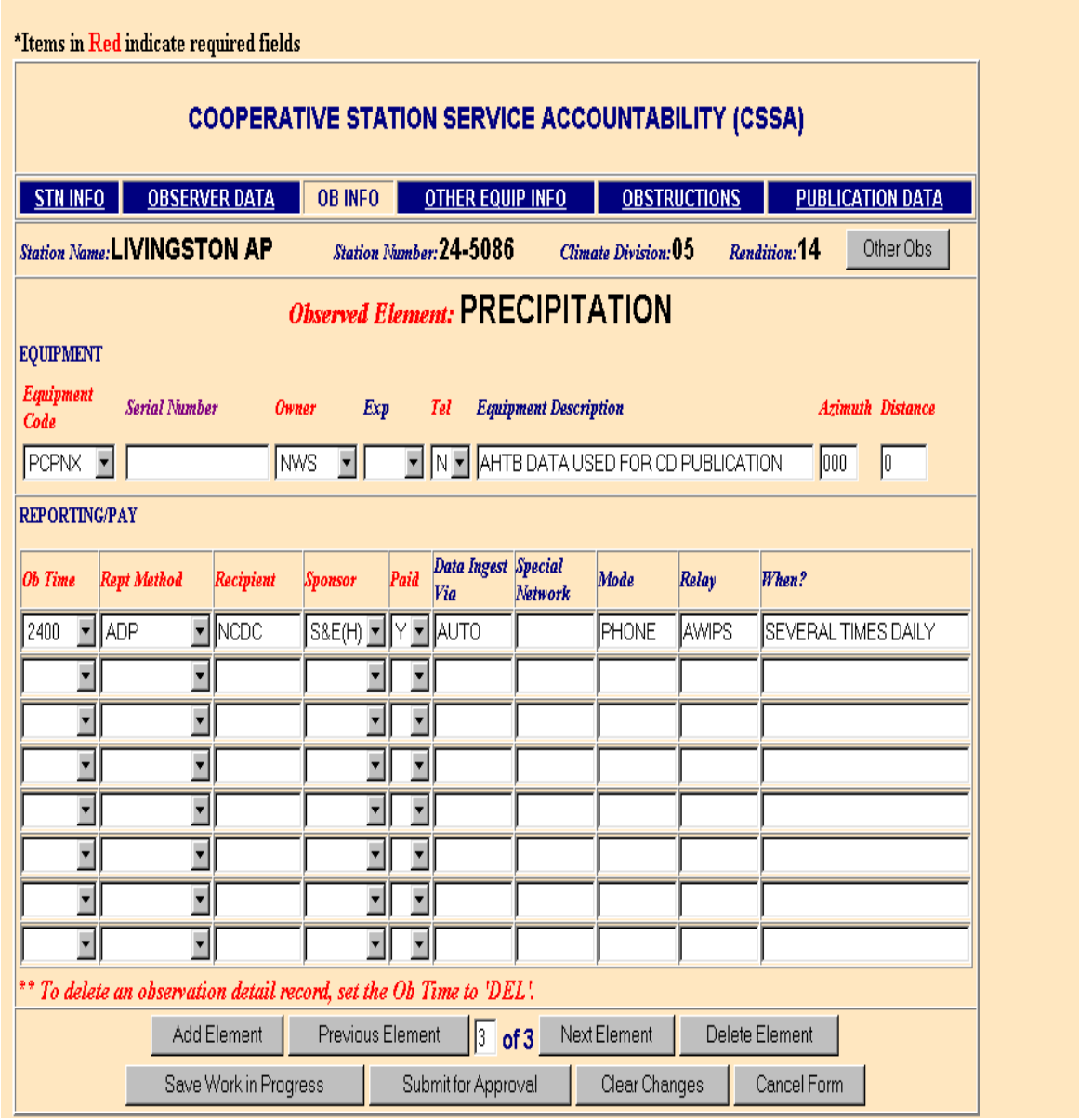

EXHIBIT 3-14 ASOS OB INFO Tab Precipitation CD Entry.

NOTE: This entry is required when a station does not have a SRG as backup. Without this entry the required CD publication option block cannot be chosen.

DATA ENTRY

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CHAPTER 4 - THE PAYROLL

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1. Introduction. The CD-404 is a Purchase Order that must be completed for a COOP observer to receive pay. A CD-404 must be completed for a new paid observer, to stop pay for an observer, when there is a change in pay amount or if the paid observers mailing address is changed. The NWSREP and RCPM should coordinate on preparing the form.

2. End Of Year Procedures. At the beginning of each fiscal year payroll information must be updated. This automated process, referred to as roll over, updates all **active** CD-404s for the current fiscal year and removes all canceled contracts. Also, access to the current CD-404s will be denied until the roll over is completed. Opening the CSSA database for the first time in a new fiscal year will result in a **pop up menu** asking if you want to complete the roll over. The two options are OK (Yes) or Cancel (will do roll over later) Selecting OK will cause the required fields to be updated. This pop up menu will appear each time the database is accessed until the roll over has been completed.

3. CD-404 CSSA Main Menu. Refer to Chapter 1, paragraph 4, for instructions to logon to the CSSA system. Observer pay data cannot be entered unless a station has been established in the CSSA system. Establish the station, if necessary, in accordance with Chapter 3. At the CSSA Main Menu select *Add/Change/Cancel Payroll Data*. Enter the station number as required. If a current CD-404 exists then Select *Modify Contract* at this station. If a contract does not exist then select Add. The CD-404 Payroll Management screen will be displayed. Exhibit 4-1, depicts the CD-404 Payroll Management screen.

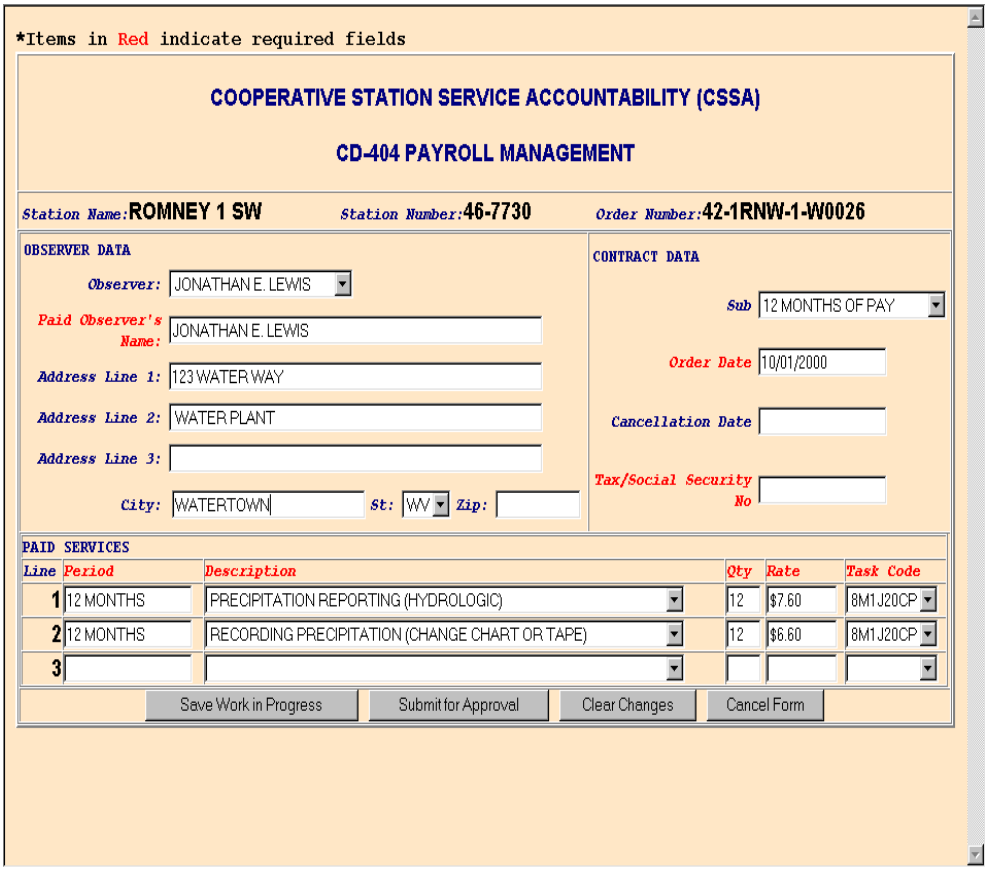

Exhibit 4-1. CD-404 Payroll Management

4. Filling in the CD-404 Data. Electronic CD-404 information is entered by the NWSREP responsible for the COOP Station. An abbreviated workflow for the Purchase Orders routes the information directly from the NWSREP to the RCPM for quality control and approval or rejection. The local Approving Official does not see the submission until the transaction has been completed and the information is not forwarded beyond the RCPM. The approved CD-404 must be printed from the reports menu (see Chapter 6), signed by the WFO Approving Official (MIC)(only signature required) and the original signed Purchase Order mailed to the ASC. The ASC arranges for quarterly payments to be made to the observers.

5. CD-404 Payroll Management Screen. The screen provides specific information about the observer pay information. The paid observer name, pay rates, addresses, and other information are included.

5.1 Fields for the CD-404. Information is provided in these tables about the fields on this screen.

5.1.1 Observer.

Field Name	Observer
Method of Entering Data	Auto Fill/Pull Down
Mandatory Entry	No
Field Description	This menu is auto filled from the CSSA Observer Data information. Select the paid observer's name.
Field Type	Text
Field Length	40

5.1.2 Paid Observer's Name.

Field Name	Paid Observer's Name
Method of Entering Data	Drop Down Menu
Mandatory Entry	Yes
Field Description	Enter the paid observer's name from the pull down menu.
Field Type	Text
Field Length	40

5.1.3 Paid Observer's Mailing Address.

Field Name	Paid Observer's Mailing Address
Method of Entering Data	Auto fill or can edit text
Mandatory Entry	Yes
Field Description	Enter the paid observer's street address. 3 lines are available. 40 characters per line.
Field Type	Text
Field Length	40 per line

5.1.4 City.

Field Name	City
Method of Entering Data	Auto fill or can edit text
Mandatory Entry	Yes
Field Description	Enter the paid observer's address city.
Field Type	Text
Field Length	25

5.1.5 State.

Field Name	State
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the paid observer's address state from the pull down menu.
Field Type	Text
Field Length	2
Value	NWSLI Table

5.1.6 Zip.

Field Name	Zip - Zip code
Method of Entering Data	Auto fill or can edit text
Mandatory Entry	Yes
Field Description	Enter the paid observer's address zip code+four.
Field Type	Text
Field Length	10

5.1.7 Sub.

Field Name	Sub
Method of Entering Data	Pull Down
Mandatory Entry	No
Field Description	Select from the pull down menu. A selection is made if the Purchase Order (PO) is to be canceled or the Paid Observer's address changes. Payment is based on a fiscal basis (Oct-Sep). **12 months** - for a complete year **9 months** - for pay from Jan-Sep **6 months** - for pay from Apr-Sep **3 months** - for pay from Jul-Sep **CN** - cancel the PO **DA** - change of address for the observer.
Field Type	Text
Field Length	14
Value	Chapter 7, table 3.21

5.1.8 **Order Date**.

Field Name	Order Date
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	The Order Date is the date when the payroll action is to start. **This date must be the first calendar day of a quarter:** 04/01/yyyy or 07/01/yyyy etc.
Field Type	Date
Field Length	10

5.1.9 **Cancellation Date**.

Field Name	Cancellation Date
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the date the PO is canceled. Every time a CN is found in the SUB field, the following statement is printed on the CD-404, CANCEL ALL EFFECTIVE mm/dd/yyyy. **The date must be the last calendar day of a quarter:** 03/31/yyyy or 06/30/yyyy, etc.
Field Type	Date
Field Length	10

5.1.10 **Tax/Social Security Number**.

Field Name	Tax/SSN
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	The observer's social security number or institution's tax identification number. **Do not enter hyphens.**
Field Type	Text
Field Length	12

5.1.11 **Period**.

Field Name	Period
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the period of time for which payment is being made. Typical entries: ***12 months, 9 months***, 6 months or 3 months
Field Type	Text
Field Length	16

5.1.12 **Description**.

Field Name	Description
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the CD-404 Paid Service Code from the pull down menu. The menu contains various combinations of observations/ services for which an observer may be paid
Field Type	Text
Field Length	1
Value	Chapter 7, table 3.22

5.1.13 **Qty**.

Field Name	Qty - Quantity
Method of Entering Data	Auto Fill
Mandatory Entry	Yes
Field Description	The computer calculates the number of months left in the **fiscal** year. An example, if the Order Date is 04/01/YYYY, the calculated entry is ***6***.
Field Type	Text
Field Length	1

5.1.14 Rate.

Field Name	Monthly Rate
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the monthly rate of pay in dollars and cents. E.g., $7.00
Field Type	Floating Point
Field Length	6.2

5.1.15 Task Code. A task code is required for each line entry in the Paid Services Section.

Field Name	Task Code
Method of Entering Data	Pull Down Menu
Mandatory Entry	Yes
Field Description	The task code is selected based on the services/observations for which the observer is paid.
Field Type	Text
Field Length	8

5.1.16 Navigation Buttons. The table details the button functions.

Button	**Function/Result**
Save Work in Progress	Saves form to CSSA database on hold without submitting the information.
Submit for Approval	Submits form to workflow process. All entries should be verified before submitting for approval. If quality control finds an error at this point the program will go to the field with the error. A prompt will be displayed at time of submission to print a draft.
Clear Changes	Clears the changes on the current screen.
Cancel Form *****CAUTION MUST BE FOLLOWED WITH THIS SELECTION*****	For a station newly established by the form, the form will be **PERMANENTLY PURGED FROM THE DATABASE, ALL INFORMATION ENTERED, INCLUDING THE STATION NUMBER, WILL BE REMOVED.** For a previously established station, **ALL INFORMATION CHANGED WILL BE PURGED FROM THE DATABASE**.

CHAPTER 5 - THE STATION INSPECTION

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1. Introduction. This chapter is designed for the station inspection data entry areas of the CSSA system. Screen depictions and tables of field details are provided to explain the data entry requirements.

2. Station Inspections. The requirements for conducting station inspections are described in NWS Observing Handbook NO. 6 and WSOM Chapters B-17 and B-73. Station visits will be documented in the CSSA by the 10th of the month following the inspections. e.g. April visits are due in CSSA by May 10th.

3. Station Inspection Menu. Refer to Chapter 1, paragraph 4, for instructions to logon to the CSSA system and display the CSSA Main Menu. Select the appropriate choice for inspections from the CSSA Main Menu. Station inspection data cannot be entered unless a station has been established in the CSSA system. Establish the station, if necessary, in accordance with Chapter 3.

3.1 Site Inspection Report Screen. The Site Inspection Report screen provides information about the COOP station's inspection. The type of inspection, inspection dates, mileage driven, costs, and other information are included. The tables and subparagraphs in Chapter 5, paragraph 3.3, provide information on entering data to the Site Inspection Report screen. Exhibit 5-1, depicts the Site Inspection Report screen. The screen is developed based on the Observation Elements and Equipment that were documented in the Station Information Section of this program. If the only observed element is Precipitation with an SRG then inspection report will only have SRG as equipment. The more observed elements and equipment at a station, the larger the inspection report form will be.

COOPERATIVE STATION SERVICE ACCOUNTABILITY (CSSA)
SITE INSPECTION REPORT

Station Name: **EUREKA RANGER STATION** *Station Number:* **24-2827** *Climate Division:* **01** *Rendition:* **10**

INSPECTION DATA

Inspector: METEOROLOGIST
Inspection Type: SEMI-ANNUAL
Inspection Date: 10/10/2001
Staff Hours 1.2
Miles Driven 12

Per Diem: Y
Trip Number: 2WT0B3804&05
Supplies Cost: 0
Trip Cost: 24.06

EQUIPMENT	Maintenance Performed - More than one may be chosen				
SRG	☐ Not Serviced	☐ Painted	☐ Modified	☐ Replaced	☐ Moved/Relocated
	☑ Routine Maintenance	☐ Calibrated	☐ Repaired	☐ Installed	☐ Removed
MXMN	☐ Not Serviced	☐ Painted	☐ Modified	☐ Replaced	☐ Moved/Relocated
	☑ Routine Maintenance	☐ Calibrated	☐ Repaired	☐ Installed	☐ Removed
F&P	☐ Not Serviced	☐ Painted	☐ Modified	☐ Replaced	☐ Moved/Relocated
	☑ Routine Maintenance	☐ Calibrated	☐ Repaired	☐ Installed	☐ Removed
CRS	☐ Not Serviced	☐ Painted	☐ Modified	☐ Replaced	☐ Moved/Relocated
	☑ Routine Maintenance	☐ Calibrated	☐ Repaired	☐ Installed	☐ Removed

168 characters left

Remarks RECHARGED F&P. REPLACED MAX AND MIN THERMOMETERS & LEFT SPARES. TWO STAFF MEMBERS.

Save Inspection Report | Clear Changes | Delete Inspection | Quit Form(don't save)

Exhibit 5-1. Site Inspection Report

3.2 ASOS Site Inspection Report. The ASOS Site Inspection Report screen provides ASOS specific information about the COOP station's inspection information. Exhibit 5-2, depicts the ASOS Site Inspection Report screen. For the ASOS Inspection reports the only equipment normally documented would be the HYGR and the TB.

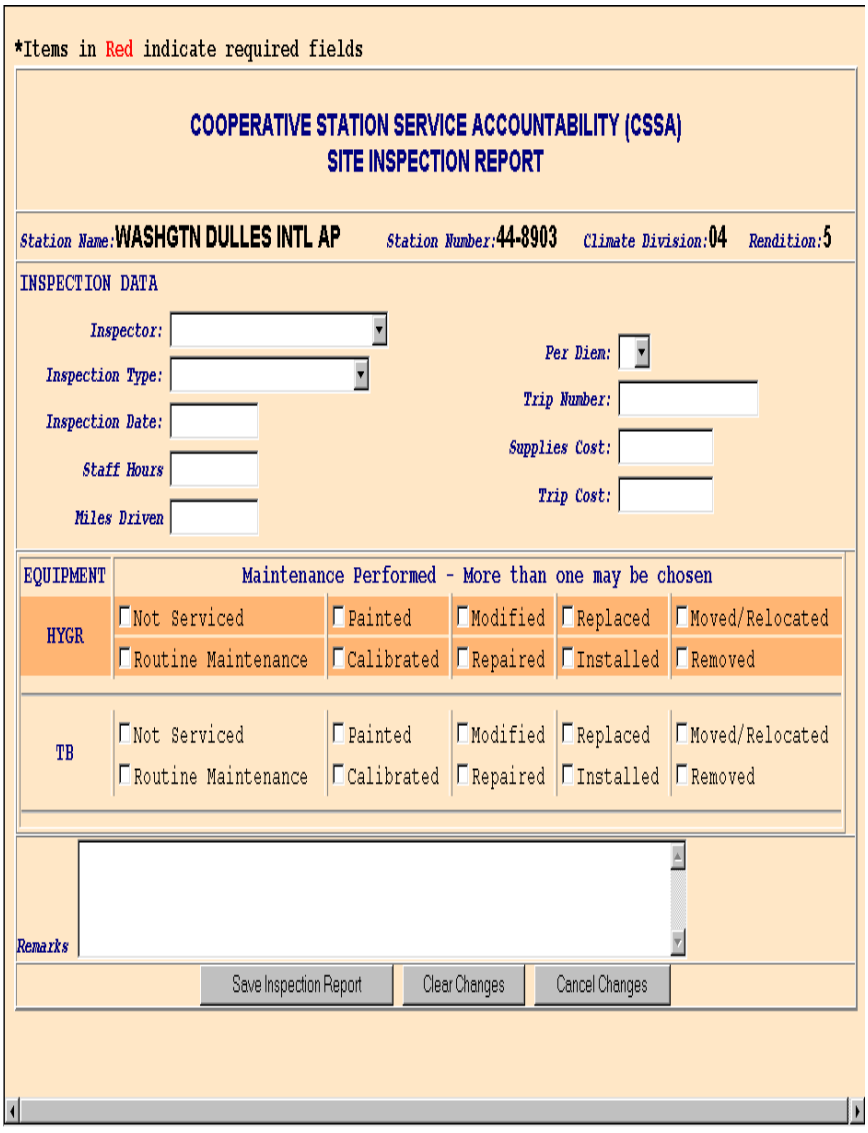

Exhibit 5-2. ASOS Site Inspection Report

3.3 Fields for the Site Inspection Report Screen.

3.3.1 Inspector.

Field Name	Inspector
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the Inspector title/job from the pull down list.
Field Type	Text
Field Length	4
Values	Chapter 7, paragraph 3.23

3.3.2 Inspection Type.

Field Name	Inspection Type
Method of Entering Data	Pull Down
Mandatory Entry	Yes
Field Description	Select the type of the inspection from the pull down menu.
Field Type	Text
Field Length	2
Values	Chapter 7, paragraph 3.24

3.3.3 Inspection Date. This is the actual date of the station inspection visit.

Field Name	Inspection Date
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the date of inspection using the format mm/dd/yyyy. Example 01/31/2001
Field Type	Date
Field Length	Fixed

3.3.4 **Staff Hours**.

Field Name	Staff Hours
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Enter the time spent driving to and from the site and at the site. For driving time calculation for multiple station visits divide the driving time equally among each site. The same time report method utilized by the Time and Attendance (T&A) is used. 15 minutes = .25 30 minutes = .50 45 minutes = .75. Round your times to the nearest 15 minute. Example: You visited five stations and total driving time was 3 hours. You were at station "A" for 1 hour and 15 minutes as part of the inspection. Your report would document 1 hour 47 minutes which is the sum of 32 minutes (180/5) for driving plus 1 hour and 15 minutes for inspection. You would encode 1.75 for total staff hours at station A. If two personnel were on the trip then just double the total time. In this example the new total time would be 3 hours and 30 minutes.
Field Type	Floating Point
Field Length	6

3.3.5 **Miles Driven**.

Field Name	Miles Driven
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	If only one station is visited for the day then enter all the mileage with that station. If you visit more than one station divide the total miles for the day by the number of stations visited that day and report that value for each station. The entry should be rounded to the nearest mile.
Field Type	Text
Field Length	4
Values	0-9999

3.3.6 **Trip Number**.

Field Name	Trip Number
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	Trip number will be the month and station visit number. i.e., the month is May and this is the 8th station visited in this month. Trip number would be 5-08.
Field Type	Text
Field Length	4

3.3.7 **Supplies Cost**.

Field Name	Supplies Cost
Method of Entering Data	Yes
Mandatory Entry	Yes
Field Description	Enter the monthly supply cost in dollars and cents in the first station visited following the month the costs were accrued in. Include in the cost all credit card and NLSC purchases for the COOP program. Example: In March you spent 43.55 on supplies. This cost would be entered in the supplies cost block on the first station visited in April. If you did not have any visits scheduled in April then the cost would be entered in the first station visited in May. In all cases you should add a statement in the remark section of the Inspection form for any station where supplies were used. I.E. used to 2 quarts of antifreeze, replaced punch block
Field Type	Floating Point
Field Length	10.2

3.3.8 **Trip Cost**.

Field Name	Trip Cost
Method of Entering Data	Text
Mandatory Entry	Yes
Field Description	If only one station is visited for the day then enter all the trip cost with that station. If you visit more than one station then divide the trip cost equally among each station visited.
Field Type	Floating Point
Field Length	10.2

3.3.9 **Remarks**.

Field Name	Remarks
Method of Entering Data	Text
Mandatory Entry	No
Field Description	Use this block to detail your actions during the station visit. Enter the Established Check Bar Value (EWW) and the current Check Bar reading (WW). River Staff Gage (SF) and Water Stage Recorder Reading (WSR) and time completed if applicable. Soil thermometer information should also be documented in this area. *Example: Replaced MMTS-1 with MMTS-7. Replaced fluids in F/P. EWW 22.22 vs WW 22.34.*
Field Type	Text
Field Length	256

3.3.10 Check Boxes. The check boxes are self explanatory and should be used where applicable. ASOS locations will document only heated tipping bucket and the hygrothermometer in the COOP Inspection Reports. (See Exhibit 5-2).

3.3.11 Navigation Buttons. There are 4 navigation buttons at the bottom of the Site Inspection Report screen. The table below lists the button functions.

Button	**Function/Result**
Save Inspection Report	Saves Report to CSSA database.
Quit Form (Don't Save)	Leave the inspection screen and reset to previous entries. Any current entries will be lost.
Clear Changes	Clears the changes but remain on the current station inspection screen.
Delete Inspection ***CAUTION MUST BE FOLLOWED WITH THIS SELECTION*	**The changes will be PERMANENTLY PURGED FROM THE DATABASE, ALL INFORMATION ENTERED, WILL BE REMOVED.**

CHAPTER 6 - THE REPORTS

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1. Introduction. This chapter describes reports available in the CSSA program. Additional reports may be added in the future if there is a requirement. Screen depictions for the reports menu are provided to explain how to generate reports.

2. Report Menu. Refer to Chapter 1, paragraph 4, for instructions to logon to the CSSA system. Currently there are eight reports available from the reports menu. The reports will load directly onto the Adobe software and are available for viewing or printing. Exhibit 6-1, depicts the CSSA Report Menu screen. The report menu is a selection from the CSSA Main Menu (see Exhibit 1-2).

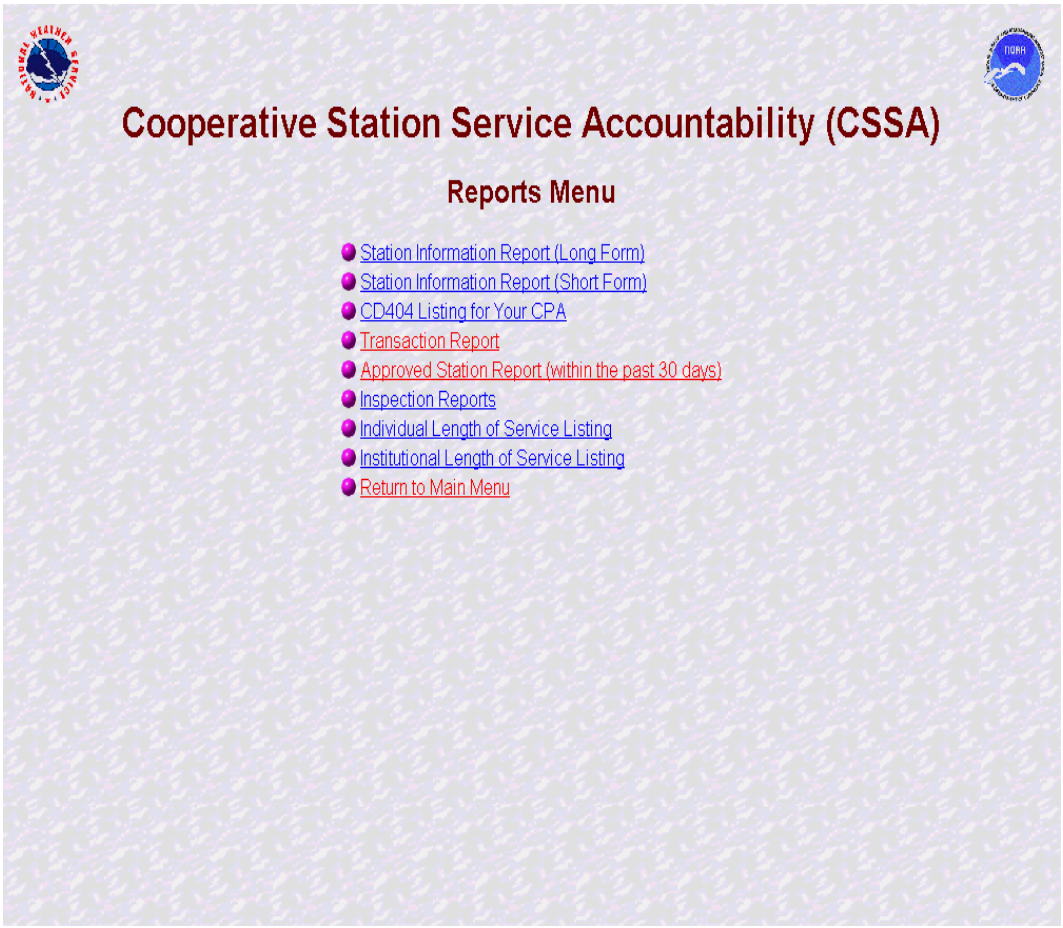

Exhibit 6-1. Report Menu

2.1 Browsing Forms. The CSSA forms may be browsed using the reports selection. This browse feature is read only.

2.2 Queries and Reports not listed on the Reports Menu. It is recognized there may be additional reports or queries required by the WFOs not available in the CSSA system. Additional reports will be supported through individual requests from each WFO. An email should be provided to the RCPM and either the RCPM or the NCPM will generate the report or query of the CSSA database and provide the information to the WFO.

Menu selection for Exhibit 6-1	Action
Station Information Report (Long Form)	**Displays a 6+ page report. Printing is available**
Station Information Report (Short Form)	**Displays a 2 page report. Printing is available.**
CD404 Listing for your CPA	**Displays a list of all current and canceled contracts for the current fiscal year.**
Transaction Report	**Displays all SIRs being processed and their status**
Approved Station Report (within the past 30 days)	**Displays a list of all approved SIRs.**
Inspection Reports	**Can display all inspections or choose a specific month. Printing is available.**
Individual Length of Service Listing	**Display based on current calendar year. Listing in ascending order. Printing is available.**
Institutional Length of Service Listing	**Display based on current calendar year. Listing in ascending order. Printing is available.**

CHAPTER 7 - CSSA LOOKUP TABLES

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1. Introduction. This chapter contains the CSSA lookup tables.

2. Purpose. These tables are used to describe pull down menu lists to facilitate data entry.

3. Lookup Tables. Table values may be added, changed or removed through coordination with the RCPM.

Table 7.1 - CSSA Reason for Report Code

Field Values	Description - Reason for Report
01	ESTABLISH A STATION - This entry is used when a station is established and a climatologically compatible station did not exist in the past. If such a station has existed previously, refer to code 03. Establishment of a station that has "a" network designation should include a statement ***NETWORK "a" AUTHORIZATION FROM ANYTOWN, USA (99-9999-0) CLOSED 2/2/66.***
02	CLOSE A STATION - This entry is used when a station is closed. If the station is "a" network services, remarks should have a statement, ***"A" NETWORK AUTHORIZATION REVERTS TO "a" PLANNED STATUS***
03	REESTABLISH A STATION (COMPATIBLE) - This entry is used when a previously closed station is installed at the same location or at a climatologically compatible location. ***If the station is reestablished and the previous rendition is not part of the CSSA database, contact the RCPM for special instructions.*** Remark entry must include the distance in miles and direction using a 16-point compass from the old site to the re-established site and the previous station name if changed. If the location is identical, enter ***REESTABLISHED SAME LOCATION.*** Possible situation: A station was established at Bliss, ID. The station was within the town boundaries and was assigned the station number, 10-1002-7. In 1975, the station was closed until a replacement observer was found in 1983. The new observer lived on a ranch 4 miles NW of the Bliss Post Office. The data from both locations are considered climatologically

Field Values	Description - Reason for Report
	compatible. Example: ***REESTABLISHED AT COMPATIBLE SITE 4 MI NW OF PREVIOUS LOCATION. NETWORK "a" AUTHORIZATION FROM BLISS, ID (10-1002-7) CLOSED 1975. PREVIOUS NAME - BLISS***
04	COMPATIBLE STATION RELOCATION - Used when a station is moved and remains climatologically compatible with its previous location. Enter the distance and direction using a 16-point compass from the old site to the new site and the old station name, if different. Example: ***RELOCATED 1.3 MI SW. COMPATIBLE LOCATION. PREVIOUS NAME - ANYTOWN 4 NW.***
05	LOCALIZED EQUIPMENT MOVE - Use this entry when the observing equipment is moved, but the station remains at the same site for all practical purposes. An observer might ask that equipment be moved to another area of the yard or the NWSREP might move equipment to improve exposure. Enter the distance in feet and the direction using a 16-point compass from the old to the new location. Example: ***MMTS MOVED 100 FT E***
06	INACTIVATE A STATION - Use this entry when a station will be inactive and it is expected that observations will resume within 6 months. This situation might occur when an observer is on vacation and there is no relief observer or when equipment becomes inoperative and the NWSREP is unable to visit the site. If observations are not resumed within six months, the station should be closed. Remarks might be: ***OBSERVER QUIT 3/3/01, WILL RECRUIT REPLACEMENT*** or ***OBSERVER ON SUMMER RANGE FOR 2 MOS, NO BACKUP OBSERVER AVAILABLE.***
07	REACTIVATE AN INACTIVE STATION (NOT A MENU ITEM, IF YOU ENTER A STATION NUMBER AND THE STATION IS INACTIVE YOU ARE THEN ASKED TO REACTIVATE A STATION OR CLOSE IT) - Entry is used to change the status of a station from Inactive to Active at the same location. Stations that are reactivated at new locations must select Relocate a Station (code 04). Example: ***REACTIVATE STATION - SAME LOCATION.***

Field Values	Description - Reason for Report
10	CHANGE - Use this entry to note any changes to the SIR entries not covered by the above codes. All changes made to the SIR shall be documented in the remarks section, be brief. Example: ***CHANGE OBSERVATION TIME AND HOME PHONE. UPDATED LAT/LON, DRVG DIR, EXPOSURE.***

Table 7-2 CSSA Horizontal Datum

Field Values	Description- Horizontal Datum
NAD83	North America Datum 1983
NAD27	North American Datum 1927
Old Hawaiian	Hawaiian Horizontal Datum - to be used in the Pacific Region only
UNKNOWN	UNKNOWN - SELECT WHEN IN DOUBT

Table 7-3 CSSA Vertical Datum

Field Values	Description - Vertical Datum
NAVD88	North America VDatum 1988
NAGVD29	North America VDatum 1929
MSL	Mean Sea Level - to be used in Pacific Region Only
UNKNOWN	UNKNOWN - SELECT WHEN IN DOUBT

Table 7-4 CSSA Lat/Lon Source

Field Values	Description - Lat/Lon Source
10	GPS – NON-SPECIFIC/BRAND NOT SPECIFIED
20	USGS TOPOGRAPHICAL MAP
30	GPS – GARMIN, MODEL 45
61	GPS – GARMIN, MODEL III PLUS
60	GPS – GARMIN, MODEL III
40	GPS – GARMIN, MODEL 450
50	GPS – GARMIN, MODEL 50
70	GPS – GARMIN BRAND, MODEL NOT GIVEN
80	GPS – LOWRANCE GLOBALMAP 100
90	GPS – MAGELLAN MARINER
100	GPS – MAGELLAN MERIDIAN XL
110	GPS – MAGELLAN NAV 5000
120	GPS – MAGELLAN BRAND, NO MODEL GIVEN
130	ASOS SITE SURVEY
140	DELORME MAP ATLAS
150	FAA – PROVIDED AIRPORT REFERENCE POINT
160	INITIAL DATABASE LOAD – LAT/LONG IN PLACE

Table 7-5 CSSA Network Code

Field Values	Description - NETWORK CODE
COOPA	COOPERATIVE STATION CLIMATE (A)
COOPAB	COOPERATIVE STATION CLIMATE – HYDRO (AB)
COOPABC	COOPERATIVE STATION CLIMATE – HYDRO – MET (ABC)
COOPAC	COOPERATIVE STATION CLIMATE – MET (AC)
COOPB	COOPERATIVE STATION HYDRO (B)
COOPBC	COOPERATIVE STATION HYDRO – MET (BC)
COOPC	COOPERATIVE STATION MET (C)

Table 7-6 CSSA Station Type Code

Field Values	Description - Station Type
92	COOPERATIVE OBSERVER STATION
06	ASOS
40	WEATHER FORECAST OFFICE (WFO)
60	RIVER FORECAST OFFICE (RFC)
10	DATA COLLECTION OFFICE (DCO)
73	WS CONTRACT MET OB (WSCMO)
03	BASIC CONTRACT OBSERVING STATION
01	AUTO MET OBSERVING STN (AMOS)
02	SUPP AVIATION WX REPT STN (SAWRS)
04	FLIGHT SERVICE STATION (FSS)
05	LIMITED AVIATION WX REPT STN (LAWRS)
07	SYNOPTIC OBSERVING STATION
08	COMBINED SYNOPTIC/BASIC OBSERVING STN
09	MARINE REPT/COAST GUARD STN (MARS)

Table 7-7 CSSA Time Code Zones

Field Values	Description - Time Zones
10	ATLANTIC
20	EASTERN
30	CENTRAL
40	MOUNTAIN
50	PACIFIC
60	ALASKAN
70	HAWAII OR BERING
80	INDIANA
90	ARIZONA
100	NEWFOUNDLAND (GMT - 3:30)
110	MIDWAY ISLAND, SAMOA (GMT - 11:00)
120	ENWIWETOK, KWAJALEIN (GMT - 12:00)
130	MARSHALL ISLANDS (GMT +12:00)
140	SOLOMON ISLANDS (GMT + 11:00)

Field Values	Description - Time Zones
150	GUAM, PORT MORESBY (GMT + 10:00)

Table 7-8 CSSA Climate Observer Ranking

Field Values	Description - Observer Ranking
10	PRIMARY
20	SECONDARY
30	ALTERNATE #3
40	ALTERNATE #4
50	ALTERNATE #5
60	ALTERNATE #6
70	ALTERNATE #7
80	ALTERNATE #8
90	ALTERNATE #9

Table 7-9 CSSA Observer Title

Field Values	Description - Observer Title
1	MR.
2	MRS.
3	MS.
4	MISS
	CHIEF
5	DR.
6	REV.
7	NO TITLE

Table 7-10 CSSA Observed Elements

Field Values	Description -Observed Element	Equipment Category Code
TMP	TEMPERATURE	TEMP
WND	WIND VELOCITY AND/OR DIRECTION	WIND
SOT	SOIL TEMPERATURE	SOIL
SNO	SNOW DEPTH	SNOW
SND	SNOW WATER EQUIVALENCY	SNSRG
RIV	RIVER STAGE	RIV
PCN	PRECIPITATION	PCPN
EVP	EVAPORATION	EVAP
DPT	DEW POINT TEMPERATURE	TEMP
RES	RESERVOIR OR LAKE LEVEL	RIV
HPR	HOURLY PRECIPITATION REPORT	HPCPN

Table 7-11 Observation Time NOTE: MID is used to denote an automated observation taken at midnight. 2400 is used to denote a manual observation taken at midnight.

Field Values	Description - Observation Time
0700	7:00 AM
1700	5:00 PM
MID	MIDNIGHT - AUTOMATED OBSERVATIONS
0800	8:00 AM
1600	4:00 PM
SR	SUNRISE
SS	SUNSET
0600	6:00 AM
0630	6:30 AM
0700	7:00 AM
0730	7:30 AM
0800	8:00 AM
0830	8:30 AM
0900	9:00 AM
0930	9:30 AM
1000	10:00 AM
1030	10:30 AM
1100	11:00 AM
1130	11:30 AM
NOON	12:00 PM
1230	12:30 PM

0800	8:00 AM
1300	1:00 PM
1330	1:30 PM
1400	2:00 PM
1430	2:30 PM
1500	3:00 PM
1530	3:30 PM
1600	4:00 PM
1630	4:30 PM
1700	5:00 PM
1730	5:30 PM
1800	6:00 PM
1830	6:30 PM
1900	7:00 PM
1930	7:30 PM
2000	8:00 PM
2030	8:30 PM
2100	9:00 PM
2130	9:30 PM
2200	10:00 PM
2230	10:30 PM
2300	11:00 PM
2330	11:30 PM
2400	MIDNIGHT - MANUAL OBSERVATIONS
0030	12:30 AM
0100	1:00 AM
0130	1:30 AM
0200	2:00 AM
0230	2:30 AM
0300	3:00 AM
0330	3:30 AM
0400	4:00 AM
0430	4:30 AM
0500	5:00 AM
0530	5:30 AM
VAR	variable observation time
DEL	deletes the observation

Table 7-12 CSSA Reporting Method

Field Values	Description - Reporting Method
B91	DAILY RIVER & CLIMATOLOGICAL REPORT
B92 (E22)	DAILY EVAPORATION AND CLIMATOLOGICAL REPORT
B18	FISHER & PORTER TYPE GAGE PUNCH TAPE
RDP	DIGITALLY REPORTED DATA
REP	MANUALLY REPORTED DATA FROM OBSERVER
TEL	TELEMETERED DATA
ADP	DATA REPORTED ELECTRONICALLY TO NCDC
B16	SURFACE WEATHER OBSERVATION DAILY RECORD
B27	COOPERATIVE STATION SUPPLY REQUEST
E1	PRECIPITATION RECORD OF STORAGE GAGE
F6	PRELIMINARY LOCAL CLIMATOLOGICAL DATA
B82 (F7)	COOPERATIVE OBSERVER WORKBOOK
B83A (F10A)	CLIMATOLOGICAL SUPPLEMENTARY REPORT
B83B (F10B)	REFERENCE CLIMATOLOGICAL REPORT
F11	WEEKLY WEATHER AND CROP REPORT
F53	SNOW ON GROUND WEEKLY REPORT
MFM-10A	FIRST AND SECOND ORDER OBSERVATIONS FORM
MFM-10B	FIRST AND SECOND ORDER OBSERVATIONS FORM
MFM-10C	SECOND ORDER AND SAWRS OBSERVATIONS FORM
1074	HYGROTHERMOGRAPH SUMMER CHART
1074C	HYGROTHERMOGRAPH WINTER CHART
1076	THERMOGRAPH CHART, - 20° TO 110° F
1076C	THERMOGRAPH CHART, WITHOUT TIME AND TEMPERATURE
452-2	UNIVERSAL CHART, 2.4-INCH ST, 24 HOUR
1028C	UNIVERSAL CHART, 12-INCH DT, 24 HOUR
1028H	UNIVERSAL CHART, 12-INCH DT, 192 HOUR (4046B)
SPCL	Used by Los Angeles County offices to report daily and hourly precipitation
920-11D	**Used by COE in California to report hourly precipitation**

Table 7-13 CSSA Sponsor Code

Sponsor Code Value	Network	Description - Sponsor
FC-1	B	SALARY AND EXPENSE (FC-1)
S&E	A	SALARY AND EXPENSES (CLIMATOLOGICAL)
S&E (A)	C	SALARY AND EXPENSES (AGRICULTURAL)
S&E (H)	B	SALARY AND EXPENSES (HYDROLOGICAL)
S&E (M)	B	SALARY AND EXPENSES (MOUNT ST. HELENS)
ASSO	BC	ASSOCIATE
BPA-1	B	BONNEVILLE POWER ADMINISTRATION
FC-2	B	LOWER MISSISSIPPI RIVER
FC-5	B	WILLAMETTE RIVER
FC-6	B	YAZOO RIVER
FC-7	B	RED RIVER
FC-8	B	WALLACE LAKE RESERVOIR
FC-9	B	MIDDLE ARKANSAS RIVER
FC-10	B	HUNTINGTON DISTRICT
FC-11	B	LOUISVILLE DISTRICT
FC-12	B	NASHVILLE DISTRICT
FC-13	B	MOBILE REPORTING NETWORK
FC-15	B	ST. FRANCIS RIVER
FC-16	B	LOWER ARKANSAS RIVER
FC-17	B	SNAKE RIVER (RH-1)
FC-18	B	DELAWARE RIVER (RH-2)
FC-20	B	QUACHITA RIVER
FC-21	B	UPPER TRINITY BASIN
FC-22	B	BRAZOS RIVER
FC-23	B	NORTH CONCHE RIVER
FC-24	B	BUFFALO BAYOU
FC-25	B	BAYOU BODCOU RESERVOIR
FC-26	B	TEXARKANA RESERVOIR
FC-27	B	FARRELL'S BRIDGE RESERVOIR
FC-28	B	MORRINGSPORT RESERVOIR
FC-30	B	ROANOKE RIVER
FC-32	B	MIDDLE MISSIPPI RIVER
FC-33	B	KANSAS CITY DISTRICT REPORTING
FC-35	B	LEON RIVER
FC-36	B	SAVANNAH RIVER

FC-39	B	GENESES RIVER
FC-40	B	HO RDS CREEK RESERVOIR
FC-42	B	GUADALUPE RIVER
FC-43	B	INTRA-COASTAL CANAL
FC-44	B	NACHES RIVER
FC-46	B	SAN FRANCISCO DISTRICT
FC-48	B	ALBUQUERQUE DISTRICT
FC-49	B	PHILADELPHIA DISTRICT
FC-50	B	OMAHA DISTRICT
FC-51	B	PUERTO RICO DISTRICT
FC-52	B	NORFOLK DISTRICT
IRPN-1	B	DEPARTMENT OF THE INTERIOR
IRPN-2	B	DEPARTMENT OF THE INTERIOR
IRPN-3	B	DEPARTMENT OF THE INTERIOR
IRPN-4	B	DEPARTMENT OF THE INTERIOR
IRPN-5	B	DEPARTMENT OF THE INTERIOR
IRPN-6	B	DEPARTMENT OF THE INTERIOR
IRPN-7	B	DEPARTMENT OF THE INTERIOR
IRPN-8	B	DEPARTMENT OF THE INTERIOR
PRHN	B	PUERTO RICO HYDROLOGIC NETWORK
S&E (B)	A	SALARY AND EXPENSES (BENCHMARK STATION)
S&E (P)	C	SALARY AND EXPENSES (PUBLIC SERVICE)
S&E(R)	C	SALARY AND EXPENSES (MARINE)
SCS-1	B	NATURAL RESOURCES CONSERVATION SERVICE
SJRA	B	SAN JACINTO RIVER AUTHORITY

Table 7-14 CSSA Equipment Category

Field Values	Description - Equipment Cat.
TEMP	TEMPERATURE
PCPN	PRECIPITATION
RIV	RIVER
DAA	DATA ACCESS
TEL	TELEMETRY
EVAP	EVAPORATION
SNOW	SNOW
SNWX	SNOW WATER EQUIVALENCY
SOIL	SOIL
SOLR	SOLAR RADIATION
WIND	WIND
MISC	MISCELLANEOUS
HPCPN	HOURLY PRECIPITATION

Table 7-15 CSSA Equipment Code

Equipment Code	Equipment Category	Description Needed	Equipment Code Description
AWS	TEMP	False (F)	AIRWAYS SHELTER
ATEMP	TEMP	F	ASOS HYGROTHERMOMETER
HTG	TEMP	F	HYGROTHERMOGRAPH
HYGR	TEMP	Mandatory	HYGROTHERMOMETER
MMTS-1	TEMP	Mandatory	MAX/MIN ELECTRONIC TEMP SYSTEM WITH DISPLAY TYPE C450-1
MMTS-7	TEMP	Mandatory	MAX/MIN ELECTRONIC TEMP SYSTEM WITH DISPLAY TYPE C450-7
MXMN	TEMP	F	MAX/MIN THERMOMETERS
PSY	TEMP	F	PSYCHROMETER
SIX-T	TEMP	F	SIXES THERMOMETER - TAYLOR
TG	TEMP	F	THERMOGRAPH
TEMPX	TEMP	Mandatory	OTHER TEMPERATURE EQUIPMENT
AHTB	PCPN	F	ASOS HEATED TIPPING BUCKET
F&P	HPCPN	Mandatory	PUNCH TAPE RECORDING RAINGAUGE
PLASTIC	PCPN	F	4-INCH PLASTIC RAINGAUGE
SRG	PCPN	F	8-INCH STANDARD RAINGAUGE

Equipment Code	Equipment Category	Description Needed	Equipment Code Description
STO	PCPN	Mandatory	STORAGE GAUGE
TB	HPCPN	Mandatory	TIPPING BUCKET RAINGAUGE Model
UNIV	HPCPN	Mandatory	UNIVERSAL RECORDING RAINGAUGE
PCPNX	PCPN	Mandatory	OTHER PRECIPITATION EQUIPMENT
ADR	RIV	F	ANALOG DIGITAL RECORDER
BUBLER	RIV	F	BUBLER RIVER GAUGE
ENCODER	RIV	F	SHAFT ENCODER ON RECORDER
SF	RIV	Mandatory	STAFF RIVER GAUGE
STV7000	RIV	F	STEVENS MODEL 7000
STVA35	RIV	F	STEVENS MODEL A35
TM	RIV	F	TELEMARK
WSR	RIV	F	S-M LIQUID SENSOR
WW	RIV	Mandatory	WIRE WEIGHT RIVER GAGE
RIVX	RIV	Mandatory	OTHER RIVER EQUIPMENT
TOUCH	DAA	F	ENCODER PAD OR TOUCH-TONE PHONE
MODEM	DAA	Mandatory	MODEM
DAAX	DAA	Mandatory	OTHER DATA ACCESS EQUIPMENT
ARC	TEL	F	AUTO REMOTE COLLECTION SYSTEM
ANT	TEL	Mandatory	ANTENNA
DARD	TEL	F	DARDC (AHOST)
DCPH	TEL	F	DATA COLLECTION PLATFORM – HANDAR
DCPO	TEL	Mandatory	DATA COLLECTION PLATFORM – OTHER
LARC	TEL	Mandatory	LIMITED AUTOMATIC REMOTE COLLECTION
RADIO	TEL	Mandatory	RADIO TRANSMITTED
TELX	TEL	Mandatory	OTHER TELEMETRY EQUIPMENT
EVAP-C	EVAP	F	COMPLETE SYSTEM TO INCLUDE PAN, ANEMOMETER, FIXED POINT OR HOOK GAGE AND SIXES
GALVAN (F)	EVAP	F	GALVANIZED PAN, FIXED POINT
GALVAN (H)	EVAP	F	GALVANIZED PAN, HOOK GAGE
MONEL (F)	EVAP	F	MONEL PAN, FIXED POINT
MONEL (H)	EVAP	F	MONEL PAN, HOOK GAGE
SIXES	EVAP	F	SIXES - EVAPORATION
EVAPX	EVAP	Mandatory	OTHER EVAPORATION EQUIPMENT
TOTAL	EVAP	F	TOTALIZING ANEMOMETER
ADIRK	SNOW	F	ADIRONDACK SNOW SCALES
FEDERAL	SNOW	F	FEDERAL SNOW SAMPLER
PILLOW	SNOW	F	SNOW PILLOW
SCALE	SNOW	F	SNOW SCALES
SNOWSTICK	SNOW	F	SNOW MEASURING STICK

SNOWSTAKE	SNOW	F	SNOW STAKE
SNOWX	SNOW	Mandatory	OTHER SNOW EQUIPMENT
BRISTOL	SOIL	Mandatory	BRISTOL RECORDER
FRONTIER	SOIL	Mandatory	FRONTIER
PALMER	SOIL	Mandatory	PALMER
SOILX	SOIL	Mandatory	OTHER SOIL EQUIPMENT
PYR	SOLR	F	PYRANOMETER
PYRH	SOLR	F	PYRHELIOMETER
SOLRX	SOLR	Mandatory	OTHER SOLAR EQUIPMENT
ACCUM	WIND	F	DIRECTION COMPONENT
ANEM	WIND	Mandatory	VELOCITY TRANSMITTER ONLY
REMOTE	WIND	Mandatory	VELOCITY/DIRECTION TRANSMITTER
WINDX	WIND	Mandatory	OTHER WIND EQUIPMENT
CRS	MISC	F	COTTON REGION SHELTER
TOWER	MISC	Mandatory	EQUIPMENT TOWER
WSHIELD	MISC	Mandatory	WIND SHIELD
MISCX	MISC	Mandatory	OTHER MISCELLANEOUS EQUIPMENT

Table 7-16 CSSA Equipment Owners

Field Values	Description- Equipment Owners
NWS	NATIONAL WEATHER SERVICE
ASSOC	ASSOCIATE
COE	ARMY CORPS OF ENGINEERS
OBSVR	OBSERVER
BLM	BUREAU OF LAND MANAGEMENT
BPA	BONNEVILLE POWER ADMINISTRATION
CRREL	COLD REGIONS RESEARCH AND ENGINEERING LAB
FAA	FEDERAL AVIATION ADMINISTRATION
FWS	FISH AND WILDLIFE SERVICE
NPS	NATIONAL PARK SERVICE
USGS	UNITED STATES GEOLOGICAL SURVEY
NRCS	NATURAL RESOURCES CONSERVATION SERVICE
USBR	UNITED STATES BUREAU OF RECLAMATION
USCG	UNITED STATES COAST GUARD
USFS	UNITED STATES FOREST SERVICE
USDA	UNITED STATES DEPARTMENT OF AGRICULTURE

Table 7-17 CSSA Equipment Exposure

Field Values	Description - Equipment Exposure
R	ROOFTOP
RS	ROOFTOP, SHIELDED
RST	ROOFTOP, SHIELDED, TOWER
RT	ROOFTOP, TOWER
S	SHIELDED
ST	SHIELDED, TOWER
T	TOWER

Table 7-18 CSSA Documentation Codes

Document Code Values	Description

HPD	HOURLY PRECIPITATION DATA
CD	CLIMATE DATA

Table 7-19 CSSA Publication Codes

Document Code Values	Pub Code Values	Description
CD	TEMP	DAILY MAX/MIN TEMPERATURE
CD	PRECIP	DAILY PRECIPITATION
CD	EVAP	EVAPORATION
CD	SOIL	SOIL TEMPERATURES

Table 7-20 CSSA Coop Program Area Sequence

Field Name	Field Type	Field Length
CPA SID	Text	1
CPA Last Sequence	Numeric	9

Table 7-21 CSSA CD-404 Sub Code

Field Values	Description
MM	12 MONTHS OF PAY
M9	9 MONTHS OF PAY
M6	6 MONTHS OF PAY
M3	3 MONTHS OF PAY
CN	CANCEL THE PO
DA	CHANGE THE ADDRESS

Table 7-22 CSSA CD-404 Paid Description Code

Field Values	Description
A	PRECIPITATION REPORTING (HYDROLOGIC)
B	RIVER STAGE REPORTING (HYDROLOGIC)
C	RECORDING PRECIPITATION (CHANGE CHART OR TAPE)
D	PRECIPITATION AND RIVER REPORTING (HYDROLOGIC)
E	PRECIPITATION, RIVER AND RECORDING PRECIPITATION SERVICES
F	SNOW DENSITY REPORTING
G	SNOW DEPTH REPORTING
H	AGRICULTURAL WEATHER REPORTING
I	RECORD EVAPORATION OBSERVATIONS
J	RECORD CLIMATOLOGICAL OBSERVATIONS
K	RECORD AND REPORT SOIL TEMPERATURES
L	PRECIPITATION AND SNOW DENSITY REPORTING
M	PRECIPITATION AND SNOW DEPTH REPORTING
N	PRECIPITATION, SNOW DENSITY, AND SNOW DEPTH REPORTING
O	PRECIPITATION, RIVER, AND SNOW DENSITY REPORTING
P	PRECIPITATION, RIVER, AND SNOW DEPTH REPORTING
Q	AVIATION OBSERVATION
R	RECORD AND REPORT SYNOPTIC OBSERVATION
S	PRECIPITATION REPORTING AND RECORDING PRECIPITATION
T	RIVER REPORTING AND RECORDING PRECIPITATION
U	DISPLAY MARINE STORM WARNINGS
V	PROVIDE WEATHER REPORTS
W	SERVICE RECORDING RAIN GAUGE

Table 7-23 CSSA Inspector Code

Field Values	Description - Inspector
DPM	NETWORK PROGRAM MANAGER
ET	ELECTRONICS TECHNICIAN
HMT	HYDRO-MET TECHNICIAN
MIC	METEOROLOGIST IN CHARGE
OTH	OTHER

RCPM	REGIONAL CPM
SH	SERVICE HYDROLOGIST

Table 7-24 CSSA Inspection Type Code

Field Values	Description - Inspection Type
S	SEMI-ANNUAL
A	ANNUAL
E	EMERGENCY
ES	EMERGENCY & SEMI-ANNUAL
EA	EMERGENCY & ANNUAL

Table 7-25 CSSA CAMS Project Task

Field Name	Field Type	Field Length
FIMA TASK Code	Text	6
FIMA Phase Code	Text	2

4. External Validation Tables. The following tables are external to the CSSA system, and are maintained by the Configuration Management Branch.

Table 7-26 NWSLI County

Field Name	Field Type	Field Length
Place Name	Text	128
County Name	Text	128
State Abbreviation	Text	2
Compressed Name	Text	128

Table 7-27 NWS Location Identifier (NWSLI) State

State Abb.	State Name or Equivalent	State Region	State No.	SID Code	State Country
AB	ALBERTA	7	68	A6	CA
BC	BRITISH COLUMBIA	7	69	B2	CA
MB	MANITOBA	7	70	M9	CA
NB	NEW BRUNSWICK	7	71	B3	CA
NF	NEWFOUNDLAND	7	72	N9	CA
NS	NOVA SCOTIA	7	74	S4	CA
NW	NW TERRITORIES	7	73	T6	CA
ON	ONTARIO	7	75	O5	CA
PE	PRINCE EDWARD ISLAND	7	76	E1	CA
PQ	QUEBEC	7	77	Q1	CA
SK	SAKATCHEWAN	7	78	S4	CA
YK	YUKON	7	79	Y2	CA
AG	AGUASCALIENTES	7		A5	MX
BJ	BAHA CALIFORNIA	7		B1	MX
CH	CHIHUAHUA	7		C6	MX
CL	COAHUILA	7		C7	MX
CM	CAMPECHE	7		C4	MX
CM	COLIMA	7		C8	MX
CP	CHIAPAS	7		C5	MX
DF	DISTRITO FEDERAL	7		D3	MX
DR	DURANGO	7		D4	MX
GJ	GUANAJUATO	7		G2	MX
GR	GUERRERO	7		G3	MX
HD	HIDALGO	7		H2	MX
JL	JALISCO	7		J1	MX
MC	MICHOACAN	7		C9	MX
MR	MORELOS	7		R2	MX
MX	MEXICO	7		X1	MX
NL	NUEVO LEON	7		L2	MX
OX	OAXACA	7		O4	MX
PB	PUEBLA	7		O3	MX
QR	QUINTANA	7		Q3	MX
QT	QUERETARO	7		Q2	MX
SL	SAN LUIS POTOSI	7		S3	MX
SN	SINALOA	7		S5	MX
SO	SONORA	7		S6	MX
TB	TABASCO	7		T3	MX

TL	TLAXCALA	7		T5	MX
TP	TAMAULIPAS	7		T4	MX
VC	VERACRUZ	7		V4	MX
YC	YUCATAN	7		Y1	MX
ZC	ZACATECAS	7		Z1	MX
AK	ALASKA	5	50	A2	US
AL	ALABAMA	2	1	A1	US
AR	ARKANSAS	2	3	A4	US
AZ	ARIZONA	4	2	A3	US
CA	CALIFORNIA	4	4	C1	US
CO	COLORADO	3	5	C2	US
CT	CONNECTICUT	1	6	C3	US
DC	DISTRICT OF COLUMBIA	1	18	D2	US
DE	DELAWARE	1	7	D1	US
FL	FLORIDA	2	8	F1	US
GA	GEORGIA	2	9	G1	US
HI	HAWAII	6	51	H1	US
IA	IOWA	3	13	I4	US
ID	IDAHO	4	10	I1	US
IL	ILLINOIS	3	11	I2	US
IN	INDIANA	3	12	I3	US
KS	KANSAS	3	14	K1	US
KY	KENTUCKY	3	15	K2	US
LA	LOUISIANA	2	16	L1	US
MA	MASSACHUSETTS	1	19	M3	US
MD	MARYLAND	1	18	M2	US
MI	MICHIGAN	3	20	M4	US
MN	MINNESOTA	3	21	M5	US
MO	MISSOURI	3	23	M7	US
MS	MISSISSIPPI	2	22	M6	US
MT	MONTANA	4	24	M8	US
NC	NORTH CAROLINA	1	31	N7	US
ND	NORTH DAKOTA	3	32	N8	US
NE	NEBRASKA	3	25	N1	US
NH	NEW HAMPSHIRE	1	27	N3	US
NJ	NEW JERSEY	1	28	N4	US
NM	NEW MEXICO	2	29	N5	US
NV	NEVADA	4	26	N2	US
NY	NEW YORK	4	30	N6	US
OH	OHIO	1	33	O1	US
OK	OKLAHOMA	2	34	O2	US

OR	OREGON	4	35	O3	US
P1	PACIFIC REGION I	6	91	P5	US
P2	PACIFIC REGION II	6	92	P6	US
P3	PACIFIC REGION III	6	93	P7	US
P4	PACIFIC REGION IV	6	94	P8	US
PA	PENNSYLVANIA	6	36	P1	US
PR	PUERTO RICO	6	66	P4	US
RI	RHODE ISLAND	1	37	R1	US
SC	SOUTH CAROLINA	1	38	S1	US
SD	SOUTH DAKOTA	3	39	S2	US
TN	TENNESSEE	2	40	T1	US
TX	TEXAS	2	41	T2	US
UT	UTAH	4	42	U1	US
VA	VIRGINIA	1	44	V2	US
VT	VERMONT	1	43	V1	US
WA	WASHINGTON	4	45	W1	US
WI	WISCONSIN	3	47	W3	US
WV	WEST VIRGINIA	1	46	W2	US
WY	WYOMING	3	48	W4	US
VI	VIRGIN ISLANDS	2	67	V3	US

Table 7-28 NWS Location Identifier (NWSLI) Region

Region Number Values	**Region Name Values**	**Region Abbreviation Values**
1	EASTERN REGION	ER
2	SOUTHERN REGION	SR
3	CENTRAL REGION	CR
4	WESTERN REGION	WR
5	ALASKA REGION	AR
6	PACIFIC REGION	PR
7	INTERNATIONAL	IT
8	NATIONAL HQ/NC	NH

Table 7-29 NWS Location Identifier (NWSLI) SID

Field Name	Field Type	Field Length
SID	Text	5
City	Text	25
County	Text	30
State	Text	2
Station Name	Text	128
Station Detail	Text	255
Country	Text	2
Region	Numeric	1
Latitude	Text	9
Longitude	Text	10
Mile	Text	10
Type	Text	8
WFO	Text	5
ET ID	Text	5

COOP ID	Text	5
HSA ID	Text	5
RFC ID	Text	5
ICAO ID	Text	5